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ABSTRACT

Designed as a resource for professionals involved in the identification of children with emotional disabilities, the document is a compilation of 10 papers presented at a workshop on the topic. "Identification of Emotionally Disabled Pupils--An Overview" by C. Smith provides a definition of emotionally disturbed students. "Setting Analysis Data in the Identification of Emotionally Disabled Pupils" by L. Miller focuses on the need for analysis to be integrated with information about the individual, social, and etiological factors. D. Sodac's paper, "The Use of Behavior Rating Scales in the Identification of Emotionally Disabled Pupils" discusses 10 commercially available or high utility rating scales. "The Use of Objective Observational Data in the Identification of Emotionally Disabled Pupils" by G. Fitzgerald traces the development of the procedure and discusses techniques. M. Shepp in "The Use of the Clinical Interview in the Assessment of Self-Concept and Affective State" presents theory and practical applications of the use of the interview technique. "Biobehaviorism--A Review of Biological Factors Which Affect Children's Behavior" by G. Harper discusses biochemical problems of emotionally disturbed children. "Academic Assessment in the Identification of Emotionally Disabled Pupils" by P. Rootes surveys potential instrumentation. Other papers are: "The Use of Home/Family Data in the Identification of Emotionally Disabled Pupils" (L. Pool); "Social Functioning Data" (J. Tewksbury); and "Translating Data into Decision Making" (K. Gerken). (PHR)

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IDENTIFICATION OF EMOTIONALLY DISABLED PUPILS: DATA AND DECISION MAKING

by

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Division of Special Education

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and

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Des Moines, Iowa

September, 1979

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INTRODUCTION AND ACKNOWLEDGEMENTS

This document is intended to provide source material for professionals involved in the identification of children who have emotional disabilities. The text is divided into three sections with 10 chapters concerning various types of data considered in formulating a diagnostic decision. The first section is an overview of issues related to the identification of pupils with emotional disabilities by Carl Smith. The second section looks specifically into sources of data used in making decisions concerning the identification of children with emotional disabilities.

Specifically, the following is considered: an analysis of the educational setting by Linda Miller, the effective use of behavior rating scales by Dave Sodac, the use of objective observational data by Gail Fitzgerald, the clinical interview as it relates to self concept and affective data by Mark Shepp, biobehaviorism by George Harper, the assessment of academic attainment by Pat Rootes, concepts regarding home and family data by Larry Pool, and social functioning by Jim Tewksbury. The final section is on how to translate data into decision making by Kit Gerken.

This publication is a result of a workshop entitled "Identification of Emotionally Disabled Pupils: Data and Decision Making," conducted in April 1979 in Ankeny, Iowa. At that time the 10 authors made presentations concerning their topics to teams of professionals from each area education agency (AEA) in Iowa. Each team consisted of a psychologist, consultant and social worker. During the fall of 1979, these teams provided an inservice training program for psychologists, social workers and consultants in their respective AEA's relating the content of this document and the April workshop. We would like to thank the Midwest Regional Resource Center for financial support and Sue Robinson and Kent Gearhart for their assistance in planning and coordinating the workshop.

The authors are all professionals working in Iowa as school psychologists, consultants for emotional disabilities, school social workers and college/university personnel. We appreciate the outstanding leadership they demonstrated and their willingness to share their expertise, ideas and various points of view concerning the identification of children with emotional disabilities.

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IDENTIFICATION OF EMOTIONALLY DISABLED PUPILS: AN OVERVIEW

Carl R. Smith

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INTRODUCTION

Perhaps more than any other area of special education, professionals in the field of emotional disabilities have expended considerable energy in attempting to specify the population who should be served in our public school programs. This appears to be the result of a natural ineptness on our part in specifically describing the pupils whom we should be serving. Also affecting identification procedures are related issues such as the professional questions which have been presented (Reynolds & Balow, 1972; Rhodes, 1975) regarding the professional practice of labeling handicapped learners.

The labeling question recently has been answered from several directions. Hobbs (1975) in The Futures of Children: Categories, Labels and Their Consequences points out that the classification of children is essential in order to provide needed services. Achenbach (1978) points to the need for conceptual categories in conducting research in childhood psychopathology. Quay (1979) concludes that research has led to the specification of several clearly defined major patterns of deviant behavior. Differences have been found between those children defined as behaviorally disordered and other categorically identified special education pupils (Barr & McDowell, 1973; McCarthy & Paraskevapovlous, 1970; Becker, 1978; Gajor, 1979).

Confusion regarding how we define that population referred to as emotionally disabled or behaviorally disordered has been consistently noted in the literature (Algozzine, Schmid & Connors, 1978; Bandura, 1969; Grosenick, 1979). Yet, it is the contention of this writer that although confusion and debate have surrounded this area, it is possible to define emotional disabilities in a manner that potentially meets both the criteria of validity and reliability.

In order to establish such a specificity in defining this area of special education, we must move beyond the identification of youngsters based solely on the opinion or judgement of individual professionals. Achenbach (1978) alludes to the dangers of such an approach in the clinical diagnosis of children when he states:

> Lacking objective criteria for discriminating normality from pathology, mental health workers may be overly sensitive to signs of pathology. This is especially true where children are concerned, because they may become anxious, constricted, impulsive, or withdrawn when brought to mental health settings, which they view as mysterious, threatening, or punitive. Clinical settings are thus likely to highlight signs of pathology, and the effect of pathological biases on clinical judgements of even the most normal children has been well documented. (766)

The major purpose of this book is to provide a framework in which professionals in our state can consistently apply an objective criteria for discriminating emotionally disabled pupils who are in fact handicapped in

obtaining an education from "troublesome" pupils and pupils more appropriately identified in another special education category.

Epstein, Cullinan and Sabatino (1977) allude to four implications of a definition of behaviorally disordered pupils. First, the definition used will indicate which interventions will be used and how the overall program is communicated to the pupil, parents, community and others. The definition used will also serve as a basis for estimates of prevalence and thus largely determine who will receive certain services. The chosen definition will also influence such areas as legislation, administrative and advocacy group decisions as well as training needs and personnel employment. Finally, the chosen definition will influence research conducted in order to more carefully explore the area of behavioral disorders.

The remainder of this chapter will discuss the identification area with a review of the definition of "seriously emotionally disturbed" as delineated in PL 94-142, a discussion of various state's approaches to defining this area and an overview of how this area is defined in Iowa. Many areas will be only touched on lightly because of the more comprehensive treatment given to various subjects in other chapters of this book.

SERIOUSLY EMOTIONALLY DISTURBED (P.L. 94-142)

According to Public Law 94-142 (1975) that handicapped population referred to as "seriously emotionally disturbed" is defined as follows:

> The term means a condition exhibiting one more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance:
>
> (A) An inability to learn which cannot be explained by intellectual, sensory or health factors;
> (B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers;
> (C) Inappropriate types of behavior or feelings under normal circumstances;
> (D) A general pervasive mood of unhappiness or depression; or
> (E) A tendency to develop physical symptoms or fears associated with personal or school problems.
>
> The term includes children who are schizophrenic or autistic. The term does not include children who are socially maladjusted, unless it is determined that they are seriously emotionally disturbed.

This definition is taken from the work of Bower (1969) which was originally developed via his extensive work in the state of California. The Iowa

definition, which will be described in detail later, deals more specifically with the procedures used to identify behaviorally deviant pupils as opposed to groupings of behaviors as delineated above. However, this writer is in agreement with Grosenick (1979) who states, "...his (Bower's) criteria appears to emphasize the major concerns of: (a) deviations in behavior and emotions, (b) unsatisfactory interpersonal relations, and (c) learning and achievement problems, all which characterize the majority of definitions of behavior disorders (Epstein, et. al., 1977). It is crucial, however, that these criteria be tempered with the variables of severity and chronicity." (p. 16) Grosenick goes on to suggest that measures of cultural and social context also be taken into account in defining the behaviorally disordered.

STATE DEFINITIONS

Epstein, Cullinan & Sabatino (1977) surveyed state departments of education regarding their definitions of behavior disorders. Forty-nine state definitions were analyzed according to eleven distinct criteria components. The eleven criteria which were applied to each definition to see if the criteria components were present included the concepts of disorders of emotion/behavior, interpersonal problems, learning/achievement problems, deviation from norm, chronicity, severity, etiology, prognosis, exlusions, special education needed and certification. The component most prevalent in state definitions was disorders of emotion/behavior, while the least common component was prognosis. These authors criticized these definitions on several points:

> They were stated very generally, to the point of being vague and ambiguous in most instances. The number of components varied greatly from state to state, and on several points, one state's definition directly contradicted another's. Even within a definition it was not difficult to find contractions. Some definitions were clearly circular (e.g. "Behaviorally disordered children are those who show emotional handicaps"). Also, many definitions were strongly influenced by medical and psychiatric viewpoints which are considered obsolete by most special education professionals. (p. 424)

A report prepared by the National Association of State Directors of Special Education (1978) also reviewed the state definitions in behavioral disorders. The results of a survey, mailed to state departments of education, indicated that 18 states plus the District of Columbia had adopted the definition or a close approximation of "seriously emotionally disturbed" as defined in P.L 94-142. Four other states indicated that behavioral disorders or emotional disturbance was not defined. A wide variance is found among the remaining definitions which tends to confirm the findings of Epstein, et. al., 1977.

IOWA DEFINITION

According to the Iowa Rules of Special Education (1977) the handicapping area of emotional disabilities is defined as follows:

> 'Emotional disability' which is manifested as a behavior disorder, is a pattern of situationally inappropriate behavior, observed in the school setting, which deviates substantially from behavior appropriate to one's age and significantly interferes with the learning process, interpersonal relationships, or personal adjustment of the pupil. The determination of this handicap is largely based on the consistency, intensity, and duration of the behavior of concern.

The chapters of this book will provide the reader with a detailed description of the means by which various types of data are collected in making diagnostic and programming decisions. It is important to keep in mind that the diagnostic procedures advocated in this state advance the notion of a multiple data base from which to make diagnostic and programming decisions rather than an overreliance on any single source of data collection. This proposal is similar to that presented by O'Leary and Johnson (1979) who state:

> Given the problems of reliability and validity of all of our assessment techniques, examiners would be wise not to make sweeping generalizations about a child's behavior on the basis of any single isolated piece of information. Instead, we recommend that the examiner look for convergences and divergences across a number of different data sources. (240)

In order to provide an overview of the identification process in Iowa the remainder of this chapter will emphasize several areas. These include a description of the comprehensive information required for the identification of any handicapped pupil, the various unique components relevant in the identification of emotionally disabled pupils, a description of the clinical consultation requirement and a brief description of the differentiation of emotionally disabled and chronically disruptive pupils.

Among those procedures required for the identification of any pupil as handicapped in Iowa is a comprehensive educational evaluation. This is described in the Iowa Rules of Special Education (1977) as follows:

> The compilation or acquisition of a comprehensive educational evaluation for each pupil which includes recent evaluations of vision, hearing, language and speech, intellect, motor functioning, adaptive behavior, social functioning, academic status, health history, and other elements

as deemed appropriate by the diagnostic-educational team. (12.19 (1) (b)

Perhaps the primary purpose of this comprehensive requirement in the area of emotional disabilities is to rule out any conditions which may in fact be affecting the deviant behavioral status of the youngster in question. For example, if a youngster is suffering from an undetected and unattended visual impairment, deviant behavior may be a manifestation of such a handicap. The chapters of this book dealing with health factors, academic functioning and social functioning relate to this comprehensive evaluation.

The other areas of data collection dealt with in this book might be interpreted as those "other elements as deemed appropriate" in the identification of a pupil as emotionally disabled. In order to review these areas, this author will analyze the components of our E.D. definition in more detail.

The first sentence of our definition states that an emotional disability is "manifested as a behavior disorder." The intent of this phrase is to emphasize that we are identifying pupils on the basis of observed behaviors which are in fact handicapping such a pupil in our school setting. Although these overt behaviors may be related to feelings and/or emotional states such as self-concept, we are emphasizing the documentation of overt behavior. Two of the chapters in this book provide the methodology for gathering such documentation. Checklist/rating scale data provide documentation of perceived behavioral patterns. Objective observation provides documentation as to the actual occurrence or nonoccurrence of targeted behavior.

Our definition also states that we are identifying a "pattern of situationally inappropriate behavior." In order to assess this variable we must have some information regarding the situation in which the behavior of concern occurs as well as what is expected in such a setting. Setting analysis information, objective observation (especially with the use of normative peer data) and social functioning data provide us with information in regard to this area.

Our definition also stresses that the behavior of concern is "observed in the school setting." This, of course, would be true in the identification of school age pupils but would not apply to pre-school age youngsters. The intent of this phrase is to stress the fact that we are identifying pupils on the basis of school behavior. This is our mandate. We are to provide educational programs for pupils who are educationally handicapped. Although these pupils may also exhibit deviant behaviors outside of school, an area from which we gather what may be supportive information, our primary reason for considering such a pupil for special education is on the basis of behaviors occurring within the school setting. Areas of data collection such as checklist/rating scale data, objective observation and social functioning data provide us with supportive information.

Another component of our definition states that the behavior "deviates substantially from behavior appropriate to one's age." By this phrase we are stressing that a close examination must be made of the qualitative nature of a given behavior in relation to the age appropriateness of such behavior. Relevant research (Pimm, Quay & Werry, 1967; Routh, Schroeder & O'Tauma, 1974) has shown the relationship of such behaviors as hyperactivity to chrono-

logical age. Consequently, it is imperative that the staffing process examine the relationship between the behavior of concern with the age appropriateness of such behavior. Checklist/rating scale data, objective observation and social functioning data should assist us in this regard.

Our definition also states that the behavior of concern "significantly interferes with the learning process, interpersonal relationships, or personal adjustment of the pupil." It is important to note that these three descriptions are linked by an or rather than and.

Academic deficits have frequently been pointed out as a salient characteristic among emotionally disabled pupils (Morse, Cutler & Fink, 1964; Bower, 1969). In some cases this may lead to a premature diagnosis of learning disabilities. In the area of emotional disabilities, however, we hypothesize that the pupil manifests academic deficits primarily as the result of deviant behavioral patterns. Within our academic assessment we are interested in obtaining information for diagnostic purposes and helping plan an appropriate academic program for the child in question. We also realize that academic performance will be an important variable affecting a child's behavioral adjustment (Smith, White & Peterson, 1979).

Problems in interpersonal relationships are also quite common among emotionally disabled pupils. This refers to both relationships with peers and adults. Social functioning data, objective observation, checklist/rating scale data and setting analysis data may be particularly important in this area of documentation.

When referring to the "personal adjustment of the pupil" we are dealing more directly with the affective status of an individual pupil. Among the areas explored are how this pupil perceives the school setting, his/her peers and such nebulous yet all important constructs as "happiness". Self-concept information becomes very important in this area. The chapters in this manual dealing with self-concept/affective data and home family data are most important in examining this area.

The final sentence of our Iowa definition reads, "The determination of this handicap is largely based on the consistency, intensity, and duration of the behavior of concern."

When looking at a youngster suspected of being diagnosed as emotionally disabled we should examine and document the consistency of the reported problem. Is this behavior of concern something we see rarely or has the behavior taken on a consistent quality? Is the behavior observed only once every three weeks or do we see it an average of every fifteen minutes during the school day?

How intense is the behavior with which we are concerned? In the area of disruptive behavior is the pupil's behavior so disruptive that everyone in the classroom is disturbed? If we are concerned with verbal behavior, is the disruptive verbal behavior excessively loud or in a normal tone of voice? If the student has consistent difficulties in getting along with peers, is this a minor verbal provocation or an intensive physical fighting with his peers?

What is the duration of the behavior under question? Does it last or quickly fade away? Does Sally withdraw into her silent world for 10 minutes and then return to acceptable behavior? Or, does her extreme withdrawn behavior persist for two, three, four hours at a time? Also, how long has this behavior been occurring?

Checklist/rating scale information can provide us with the perceptions of such persons as the teacher, principal or parent regarding consistency, intensity and duration. Structured classroom observation can provide us with information regarding the actual occurrence of targeted behaviors. Additional information dealing with such variables as duration can be gathered from anecdoted records and visiting with the family.

Clinical Consultation

According to the Iowa Rules of Special Education (1977):

> 12.19(3) When recommendations for a pupil with emotional disabilities indicate a need for provision of services in a self-contained special class, there shall be a consultation either with a psychologist, licensed in Iowa, or a psychiatrist. The purpose of this consultation is to review the potential effects of the proposed program upon the pupil. This consultation may also include additional recommendations related to most appropriately meeting the pupil's needs. The director of special education is responsible for maintaining a record indicating the completion of such a consultation prior to the pupil's placement in the proposed self-contained program.

Many people have appeared to misinterpret this comment as going outside of the school setting to gain approval from someone, such as a psychiatrist, prior to placing a youngster with emotional disabilities in a self-contained program. This is not the case. Rather, we are seeking the professional opinion of someone trained in dealing with emotionally disabled youngsters in both therapeutic and educational areas. We are presenting the diagnostic information we have, a description of the program we are proposing and asking "Do you have any concerns regarding this proposed placement?" This should add to the procedural safeguards we provide for those youngsters we are identifying as emotionally disabled. We are not asking or requiring such things as clinical diagnoses, approval of our decisions or abdicating our responsibility of the diagnostic educational team to determine whether a youngster is in need of services provided under the area of emotional disabilities.

Differentiation of Emotionally Disabled Pupils from Chronically Disruptive Pupils

Another related area of special education in Iowa is that population referred to as "chronically disruptive." Our Iowa definition of chronically disruptive states:

> "Chronically disruptive" is the inclusive term describing those pupils who repeatedly exhibit markedly unacceptable behavior preventing a satisfactory adjustment to the regular school program and significantly interfering with the pupil's learning process and interpersonal relationships. This behavior occurs to such a degree that the administration or local school district board has excluded the pupil from the regular instructional program. The school shall document prior attempts to modify the regular education program in such a way as to meet the educational needs of the pupil. A director of special education shall consult with representatives of appropriate juvenile agencies as a part of the diagnostic-educational staffing. (Rules of Special Education, 1977).

It is a difficult process to differentiate those pupils who are more appropriately identified as emotionally disabled from those whom might be referred to as chronically disruptive. What follows is a description of the contrasting variables to be included in this decision which was first presented by this writer in 1977 (Smith, 1977). One of the primary problems in applying this criteria is that much of it is based on professional perceptions regarding the intent of a particular child or adolescent when engaging in various behaviors. With this caution in mind the following suggestions are offered as a starting point in making this diagnostic decision.

Morse (1958) stated, "It is very difficult to separate children who feel guilt but who ward it off by saying that they do not care, from those who, upon deep probling, really do not care." (P. 576)

This is one of the most commonly cited differentiations of these two populations. The chronically disruptive pupil typically has lower anxiety and does not seem concerned with what happens; particularly that which does not affect him or her directly. Conversely, the emotionally disabled youngster may experience a high anxiety level and does seem to be concerned with consequences. Telford and Sawrey (1967) point to a social learning differentiation of these two populations.

> The same overt behavior can stem from either emotionally disturbance or social maladjustment. When the behavior pattern derives rather directly from the obvious social-learning situation and other aspects of personality malfunction are not present, it is generally called

> "social maladjustment." When the behavior of the individual is unlike that of his immediate peers and it is not apparent how the behavior was learned, it usually comes under the category of "emotionally disturbed." Many children who are delinquent are really victims of unfortunate social situations and have learned inappropriate behavior, but they are not emotionally disturbed. (p. 400)

Kirk (1972) concurs with this observation regarding the similarities of the surface overt behaviors of the chronically disruptive and emotionally disabled youngsters. He goes on to say:

> It is the dynamics behind the behavior that is different. Children who are socially maladjusted display behavior which may be highly valued within a small group (usually a small gang or peer group) but which is not within the range of culturally permissable either at home or in the school or in the community. (Mackie, Kvaraceus and Williams, 1967). The socially maladjusted are able to adapt "on the street" with responses approved by the peer group of which they are a part, (i.e. gang), but they come in conflict with parents, teachers, and others outside their immediate peer group. These children are usually unmanageable in the home, generate problems in the school, or are behind the educational achievement and are destructive, totally immature. They are generally characterized by lack of anxiety and they display antisocial behavior which interferes with the lives of others. (P. 319)

But what other characteristics differentiate the chronically disruptive from the emotionally disabled? Much of the following information is based on diagnostic opinions shared with me by Darrell Dierks and Jon Ford of Area Education Agency 7 in Cedar Falls, Iowa.

As mentioned earlier, a high anxiety level is often characteristic of those youngsters referred to as emotionally disabled. In contrast to this, the chronically disruptive youngster may often be characterized as possessing a low anxiety level. For most secondary youngsters, being sent to the principal's office may be considered an anxiety provoking situation. In contrast, chronically disruptive youngsters may appear quite calm under these circumstances and show little or no emotion when confronted with the facts of the pupil's alleged misbehavior in the school setting.

Along with this characteristic, a tendency for the chronically disruptive youngster not to appear concerned about the negative consequences of his behavior is typical. In contrast, the emotionally disabled youngster might be quite concerned with what's going to happen. The chronically disruptive youngster may also only be concerned with the consequences as they affect him/her directly. This is not the type of youngster who will be concerned with the consequences of his/her behavior as it affects the entire class. Such pleas as, "Your behavior is interfering with the learning of the entire class," will have little or no effect with these students.

The emotionally disabled youngster may be in a constant search to find ways of reducing his/her anxiety. In some cases this pupil may seek an inordinate amount of the teacher's time in trying to do so. In contrast, the chronically disruptive youngster would like nothing better than to be left alone. This student doesn't see where his/her behavior is unreasonable and has a hard timne accepting all of the "unnecessary interference from those around him/her," especially authority figures such as teachers and principals.

The emotionally disabled youngster may be aware of the problems in school and actually want to change so as to lessen these uncomfortable situations. However, the chronically disruptive youngster has a tendency to perceive the locus of the problems as possessed by others and sees the necessary changes taking place there rather than within him/herself. When asked what the problem is, the chronically disruptive youngster has a tendency to describe the problem as being the property of others rather than his/her responsibility.

In the classroom, the emotionally disabled youngster may have many problems "reading" the environment. Perceptually, this pupil may misinterpret the environment, including the relationship of personal behavior to the total classroom operation. Contrary to this, the chronically disruptive youngster may be quite proficient at reading the environment; including an eagerness to point out inconsistencies in the teacher's management interventions. The chronically disruptive youngster may work hard to "control" the classroom environment, including both peers and teachers. He or she may be quite successful in facilitating the process by which peers share in the "problems" of getting along in the traditional classroom.

In summary, we see that many of the behaviors we observe in identifying a pupil as chronically disruptive are similar to those behaviors manifested by pupils with emotional disabilities. In order to differentiate these two populations, we must examine the qualitative components of such a youngster's behavior pattern.

SUMMARY

The primary purpose of this chapter has been to offer an overview of the Iowa definition of emotional disabilities. The remaining chapters of this book will provide the reader with more specific information regarding the various areas of data collection.

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SETTING ANALYSIS DATA IN THE IDENTIFICATION OF EMOTIONALLY DISABLED PUPILS

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Setting Analysis

I. INTRODUCTION/ASSUMPTIONS

The importance of setting analysis as a component of a diagnostic system for identification of emotional disabilities is underscored in Rhodes and Tracy's (1974) "A Study of Child Variance." They found that a common thread among the five conceptual models studied was the location of the disability in a "disrupted pattern of human-environment exchanges" (Rhodes and Tracy, (p. 23). Historically, the focus of diagnostic systems has been on the individual in isolation. This focus neglects analysis of the interplay between the individual and environmental factors. Although the ownership of the problem may lie with the person, behavior episodes usually are set off by external phenomena. It is this "critical interactive process" (Morse, 1974) that gives us understanding of the nature of the problem. Neither children nor environmental factors should be assessed in a vacuum, but rather they should be viewed for their contribution to presenting problems and for their potential in the mediational process.

A diagnostic system should reach beyond categorizing to provide an understanding of the child's "current condition" (examining the state of the child and the nature of the situational stress) and to point the way to appropriate interventions (Morse, 1974, p. 142). Setting analysis is a critical element in this sytem, yielding data about both the problematic interaction process and potential counteracting resources.

Observation has come into its own as a major diagnostic tool. Most observational techniques focus on the behavior of the individual and/or the interpersonal interactions in which they engage. Some instruments (Moos, 1972) establish the normative context in which the behavior occurs by acquiring student assessment of the learning environment on rating scales. Few instruments analyze the setting as the specific context in which a given student's behavior occurs. This paper addresses the need for such analysis, which takes on significance when integrated with information about the individual, social, and etiological factors.

II. THEORETICAL CONSIDERATIONS

Integration of methodology into the practitioner's theoretical framework seems essential to the meaningful interpretation of data gathered. A brief discussion of the role of setting analysis in three prevalent conceptual models is presented below in order to facilitate this process for the reader.

A. Psychodynamic Theory

Carl Rogers (1976), building upon the work of Freud, Adler, Dreikers, Maslow, and Fenichel, applied concepts of psychodynamic theory to educational practice. Key to his viewpoint is the teacher, who provides an environment which facilitates significant learning rather than functioning as an evaluator or authority. He/she is a facilitator, an environmental manager, whose task

it is to create an environment for learning. Fritz Redl carried this thinking a step further by defining the environment as a dynamic milieu with the following components: social structure; role distribution; pecking order; communication network; staff attitudes; feelings; trait clusters; behavior received; impact of group process; routines, rituals, behavior, and traffic regulations; and space, equipment, time, and props (Rogers, 1976).

Setting analysis logically falls within study of a student's life space, focusing on the last two elements of the milieu listed above. Of significance is the particular sequence of events, origin and nature of school-related behavior regulations, and the kind and arrangement of physical properties in the space that is school. As Redl (1966) so succinctly stated:

> . . . (it is important) to find out, not only what milieu is and how it operates, but also how we can describe it, how we influence it, and by what actions of all involved it is, in turn, created or molded (p. 94).

Problems lie not within the child, but with the unique chemistry in action at the moment. Who can deny the "behavioral suction power of space, props, activities, and time. . . the inherent challenge eminating from things or from spatial arrangements (Redl, 1966, p. 89)"? Classroom conditions can be so chaotic that they keep a child in a state of psychic disequilibrium. Failure to determine this condition is a failure to provide the student with a comprehensive evaluation to which he/she is entitled.

Recently, Morse (1974) proposed a paradigm for an open system of diagnosis that operationalizes these concepts. In his "Assessment of Current Condition," "stress forces" are examined as contributing influences to the "problematic condition" and "external support forces" are identified as "potential resources" to be used in planning (Morse, 1974 p. 150). The role of setting analysis in this system is apparent.

B. Ecological Theory

Focus of this theory is on the community of people studied in their natural habitat. The ecosystem is the control concept and is defined as an interaction system comprising living things together with their non-living habitat. Because it is an open system, composed of the totality of the interaction between persons and their environment, it is difficult to determine the limits of a given system (Feagens, 1974 p. 330). Theorists contend that practitioners place human subjects in unnatural situations, controlling conditions and eliminating crucial variables. Behaviors thus emerge that are never found in the natural environment and which might be quite different if excluded variables were considered.

Like psychodynamic theorists, ecological theorists propose that emotional disturbance is neither centered solely in the individual nor within the environment, but rather is recognized to lie between the individual and the environment. The "goodness of the fit," that is, the congruence between an individual's characteristics and the environment in which he/she is placed

determines the presence or absence of a problematic condition (Feagens, 1974). In order to maintain equilibrium, people fulfill the requirements of the setting.

Roger Barker operationalized Lewin's concept of life space through attempts to encode the environment-describing the life space of individuals in a systematic way and indicating the forces that operate there. The environments he labelled "behavior settings" and the fit of the milieu-"synomorphy." Barker's followers postulated that "only when a child's behavior is analyzed within his various real life settings could any meaningful help be attempted," (Feagens, 1974, p. 357).

Ecological theory supposes that there are characteristic patterns of behavior that are recurring and consistent and that occur in relationship to the physical setting. There are two aspects to diagnostic instrumentation: recording and analyzing "behavior streams" and identifying and describing the educational environment. In addition to anecdotal recording as a method used for this analysis, Paul Gump developed synomorph mapping. The school day is defined as a network of synomorphs that extend and change over time. Mapping examines this network, its structure and nature of its parts, breaking it down into: 1) place, facilities; 2) temporal parts (beginnings, interruptions, endings); 3) teacher's role; 4) pupil activities (business, grouping, pacing); and 5) duration. Synomorphic mapping is the setting analysis of ecological theory.

C. Learning Theory

Learning theorists hypothesize that most human behavior is learned and learning occurs because of environmental contingencies. If one can identify the behavior and the contingencies supporting it, one can change the behavior. A functional analysis considers both antecedent and consequent conditions. B. F. Skinner (1953) stated that an adequate formulation of the interaction between an organism and its environment must always specify three things: 1) the occasion on which the response occurs; 2) the response itself; and 3) the reinforcing consequences (Skinner, 1953 p, 101). The first term of the contingency is as much a part of the analysis as the second and third terms. Rarely are we concerned with the strengthening or weakening of behavior without regard for the occasion on which the behavior occurs.

Application of learning theory is described by Haring and Phillips (1962). They, like psychodynamic theorists, see the capacity of the teacher to arrange events in the environment to alter an individual's behavior in a predictable direction. The way in which the environment affects a student and the student's response or lack of it may be analyzed. The environment is a set of independent variables which act as stimuli to the student's behavior. The student's behavior represents the dependent variables. Anything in the environment can be a stimulus to a response. Behavior analysis identifies the independent and dependent variables and defines their relationship. Conditions under which a new independent variable may be introduced can be controlled so that the effect on dependent variables can be determined.

Lloyd Homme is a master of contingency management which is only as successful as the accuracy of the behavior analysis. The analysis must include a functional assessment of the social situation, identifying stimuli that maintain the behavior (equivalent to "stress forces") and stimuli that can be programmed to change behavior ("external support forces").

Although typical observational techniques include identification of antecedent and consequent conditions, they frequently isolate the student and these conditions from the total milieu. A more in-depth setting analysis would permit a larger perspective and more detailed description of the context in which the behavior occurs, as well as elucidating the significance of the connection between antecedent, behavior, and consequence.

D. Summary

All three conceptual models view disturbance as occurring in a composite, equilibrated system of interdependent components. What happens, happens to a total; and the individual's own behavior, in its act, becomes part of this total--his/her own environment. All recognize the important role of the setting as an environmental component. Because of its potential as a contributing factor in the problematic condition, it seems that no diagnostic system assessing the school adjustment of a student would be complete without a systematic examination of the school setting itself. Behavior viewed in isolation of the setting in which it occurs is meaningless. By the same token, analysis of the setting with an eye to intervention potential enhances the diagnostic process, tying the behavior to planned environmental manipulation.

III. INSTRUMENTATION

> The arrangement and use of space are parts of the nonverbal communications system of the classroom. One can learn to "read" the physical arrangement of chairs and desks, the use of decorations and real and symbolic barriers to guage the present and desired levels of interaction. . . . Students affect the physical environment primarily through their use of it, the placement and orientation of their bodies as physical and social objects. (Sommer, 1977, p. 174)

The importance of setting analysis to the diagnostic process is twofold: 1) in determination of the role it plays as a factor contributing to the concerns about the individual, and 2) its potential as a component of an intervention. In the study of learning environments, two techniques are used. "High inference" measures using pupil perception have received renewed attention in recent years, while "low inference" measures involving direct observation remain popular with practitioners. Brief discussions of each follow.

A. "High Inference" Measures

The major share of the work done in this area has been carried out by H. J. Walberg through his development and use of the Learning Environment Inventory (L.E.I.). Anderson (1973) places the onset of current interest in this approach with the Harvard Project Physics. Walberg devised the Classroom Climate Questionnaire based upon this earlier work. Revision resulted in the L.E.I. in which the interaction in the classroom between institutional and individual characteristics is recognized. Items on this instrument are descriptive of typical school classes and are divided into 15 climate dimensions: cohesiveness, diversity, formality, speed, environment, friction, goal direction, favoritism, cliqueness, satisfaction, disorganization, difficulty, apathy, democratic, and competitiveness. The respondent expresses his/her agreement or disagreement with each statement on a four point Likert-type scale with ratings ranging from 1--Strongly Disagree to 4--Strongly Agree. There are seven items per scale. The L.E.I. is reported to have a reliability coefficient ranging from 0.53 to 0.85, with a median of 0.72 for a sample of 1,048 American senior high pupils (Anderson and Walberg, 1972).

Randhawa and Fu (1973) report that 300 researchers in 10 different countries are using the L.E.I. Many studies relate the instrument to learning outcomes. Those of Anderson and Walberg (1968, 1972) and Walbert (1971, 1974) claim that the scales account for substantially more learning variance than do predictors such as I.Q.

There are limitations to the use of the L.E.I. for the purposes to which this paper is addressed--identification of and programming for students with emotional disabilities. Its capability to provide "explanational" information (that which leads to a better understanding of social-psychological variables that mediate the instructional environment) and prescriptive data (that which is useful in arranging educational environments to optimize outcomes) is suspect (Ellett, 1976). In addition, the instrument was designed for high school students. (Anderson's My Class Inventory is suitable for upper elementary.) Validity may be questionable for study of an individual unless his/her responses are interpreted in relationship to an entire class--a cumbersome task, indeed, for the evaluator.

B. "Low Inference" Measures

"Low inference" measures assess stimulus and response variables through direct observation. Medley and Mitzel (1963) claim that the most successful use of observation has been in the assessment of the quality of classroom climate. Withall's Social Emotional Climate, Mitzel and Medley's Observation Schedule and Record (OSCAR) and Flander's observational systems all focus on student-teacher interactions. Procedures that use the systematic recording of antecedents and consequences as well as behaviors have greater potential for taking the setting into consideration than do systems that limit focus to interpersonal interactions. The question has been raised as to whether or not direct observational systems have the potential for describing the totality of the person - environment interactions of the education context (Ellett, 1976). The observer is asked to attend to the designated student and matters pertaining directly to him/her. This may cause important contributing factors to be overlooked.

C. Suggested Checklist

The Environmental Checklist, which will be described in detail in this paper, was designed to complement the total diagnostic process (assumed to include individual evaluation of the student, direct observation of classroom interpersonal relationships, and ratings of the student by significant persons). It is well-suited to be used as the first stage of a classroom observation, to be completed by the observer, and to serve as an orientation to the student's learning environment.

The checklist relies heavily on the expertise of the practitioner in that no simple scoring system leads to ready answers. Rather, it is based on Morse's (1974) concept of N=1 in which the professional must integrate the data derived therein will all other diagnostic data in order to obtain a meaningful construct of the problematic condition of the student.

Finally, the checklist incorporates elements of both "low inference" and "high inference" methods. It relies upon direct observation as its primary data gathering technique, but looks to the totality of the environment for its data source. Although pre-established items comprise the instrument, in order to guide the observer through a meaningful inventory of the learning environment, reliance is placed on the observer to tailor the checklist to the setting analyzed by adding or deleting items as needed.

IV. ENVIRONMENTAL CHECKLIST

Lawrence B. Rosenfeld likens the classroom to a stage setting for learning.

> If we look at classrooms with the scrutiny that a set designer looks at a bare stage, we begin to realize all the elements we can easily manipulate to help make learning the exciting, joyous experience it was before we were packed up and shipped to the neighborhood school. We can affect the arrangement of chairs, desks, tables, work spaces, play spaces, and other aspects of the set; we can control the colors, lighting, and heat which surround us;. . . (Rosenfeld, 1977, p. 107).

The Environmental Checklist breaks the learning environment into two parts: the "Learning Setting" and "Instructional Dimensions."

A. Learning Setting

1. General Information: Data in this section sets the stage for the observation by providing a general description of the setting. Items identifying the type of classroom correlate with those describing the number of students and student-teacher ratio. Their importance pertains to the number of potential distractors (significance stressed in psychoneurological research, noise levels, and possibilities for individualizing instruction).

Class size or density has been considered to have major impact on student achievement and behavior (Blake, 1954; Burgoon and Jones, 1976; Rosenfeld and Civikly, 1976). A high student-teacher ratio may reduce the opportunity for individualized instruction and increase the stress on the teacher which, in turn, decreases teacher effectiveness and increases behavior problems. Blake termed this the crowding stress syndrome. More important than the crowding, itself, is the perception of crowding, which may be a function of personal space violation (actual or perceived). The latter data may be obtained by combining information on this instrument with direct observation of actual intrusions and information about the student's perceptions of these intrusions. Modifications of the environment such as using room partitions, increasing the disparity of the room's linear dimensions, decreasing the number of entrances (Desor, 1972), and maintaining a comfortable room temperature (Griffitt and Veitch, 1971) may reduce such negative behavioral after effects as anxiety, aggression, and/or asocial behaviors--possible signals of increased psychological stress from perceived classroom crowding (Winer, 1977).

Studies by Strauss and Lehtinen regarding the effects of environmental distractors on the learning performance of students with neurological dysfunction underscore the importance of examining this factor in the classroom environment. The identification of such distractors as antecedents to inappropriate behavior may help with differential diagnosis as well as program planning. Research related to noise levels will be discussed later in this paper.

Information pertaining to the time of day, person in charge, subject, and activity in progress yields data that will enhance the meaning obtained from the individual observation about possible student energy level and about the content of the classroom being described.

2. Space: Seating arrangements communicate much about instructional approaches. Straightrow arrangements typify traditional, teacher-controlled classrooms. Rosenfeld (1977) concluded that straight rows tell students that only the teacher is free to move about, that all communication should be carried on with the teacher and not among students, that conformity is valued, and that all learning takes place in front of the room with the teacher making all the decisions. This may be quite congruent to the teacher's style and objective. Such a classroom also may be quite appropriate for a student whose social-emotional needs cause him/her to respond best in an environment relying on external rather than internal behavior control. This fact gives us important data about a student's emotional adjustment and developmental age, as well as considerations for intervention.

Sommer (1967) and Heston and Garner (1972) found that semicircle and U-shaped seating fosters increased interaction among students and among students and teachers. Although this may signal a student-centered classroom, it also establishes the peer group as a potential stimulus to maladaptive behavior.

A good deal of research has been conducted with regard to seating location. Attentive students, those who are high participants, tend to select seats in the "actionzone," i.e., right-middle, right-front, and front and

center seats (Adams, 1969; Delefes and Jackson, 1972). Becker, et al. (1973) found that the students with low grade point averages most frequently occupied seats in the sides and back of the room.

The referred student is frequently seated in a spot that isolates him/her from the group. Although this may provide a degree of control by removing him/her from proximity to classmates and/or by placing him/her near the teacher who then provides the controls the student lacks, this seating assignment is often the source of many problems. The seat may be located near a center of student activity, e.g., the teacher's desk, the pencil sharpener, the learning centers. If in the front of the room or within the visual field of the peer group, our student may be reinforced easily for inappropriate behaviors as his/her needs for social attention and/or omnipotence are met. Such isolation also may affect self concept and self esteem. Communication to the student is that he/she is different or bad. This may be just one of many messages that engage the young person in a self-fulfilling prophecy. The observer quickly can get a picture of the role assigned to the pupil and may wish to suggest alternatives to this seating assignment.

If the student is seated with classmates, who they are and how many becomes important. A seat mate can be a positive or negative model. Friends do not necessarily make the best seat mates. Heston and Garner (1972) found that males preferred to seat themselves at greater distances from each other than females (22 vs. 13 inches). This fact recognizes the importance of proximity tolerance, which also is affected by age level and amount of stress an individual is experiencing.

Learning difficulties may be brought on, or at least exacerbated by, the location of a student's desk. Lighting may be better in one part of the room than another; heating and ventilation vary by the windows, heating vents, etc.; and the view of the blackboard differs dramatically from one part of the room to another because of glare, physical barriers, tall students, etc. Desks by the window provide inviting views of outside. Daydreaming or distracted behavior are frequent by-products of this location.

A classroom divided into several areas such as learning centers, study carrels, free reading areas, etc. indicates that individualization of learning and concern for student motivation are likely to be hallmarks of the classroom. To the observer, these areas not only may be considered for incorporation into an intervention plan (e.g., part of a contingency management program), but they also may be good barometers of the overall climate of the classroom.

Finally, information about the location of the classroom in relation to bathrooms, drinking fountains, principal's office, nurse's office, outside, media center, coat storage, and other classrooms is useful. For a student entrusted to leave the classroom to run errands or attend to personal needs, the distance to these areas and potential distractors enroute may account for much lost class time by the referred student. For the distractible, impulsive boy or girl, or for one who is coping with classroom stress by task avoidance, these places become incentives for leaving the classroom. Frequency of trips and/or long delays in return may be signals of difficulties with learning or

self control. Again, interventions designed to alleviate stress factors, to manage inappropriate behaviors, or to involve the areas as incentives by systematizing their use require knowledge about the setting.

3. Props: Pupil desks and chairs are vital pieces of classroom equipment. Too often they are ignored as such. Although most classrooms are provided with a variety of sizes to accommodate the range of physical sizes of students, mismatches are a common occurance. Elementary students may exhibit writing problems or may be too close to a book to read it well because their desk is too high. Their feet may not touch the floor because their chair is too large. This can be extremely fatiguing. At the secondary level, students often are too large for their desks. Due to spurts in growth, they even may outgrow their desks during a single school year. The discomfort thus caused may lead to restless, inattentive behavior such as chair tipping.

Several considerations are related to the type of desk used. Independent modules provide the student with personal space and a sense of ownership. The importance of this to psychological well-being is widely recognized. Some desks and chairs are attached. Although this may eliminate chair tipping, it reduces flexibility in classroom arrangement and may inhibit programming. Swivel chairs, often a feature of this type of desk, are the tempting source of inappropriate behaviors. Tables and separate chairs permit the greatest flexibility.

The writing surface is very important. Does it provide support to the writing arm of the student who is left or right handed? Although slant-topped desks would appear to facilitate writing and reading by keeping materials at appropriate angles, they are troublesome to the disorganized student who may have trouble keeping things on the desk top. Teachers complain that this boy or girl is always dropping things or that the area around his/her seat is always cluttered.

Neatness of the student's work area tells us something about him/her. Does the mess inside correlate with other data that identifies poor organizational skills, or that reveals a student who is not concerned with organizational behavior at all? Does the desk harbor treasures to be pulled out and played with when the task beomces arduous or boring? Are all school papers "filed" here far from the discerning and ofttimes disapproving parental eye? The neat student is, of course, the teacher's delight. Exceptional neatness, however, may be symptomatic of compulsive behavior that can be debilitating to performance at school.

Aesthetic qualities of rooms are important factors in the overall effect created by the learning environment. In research by Maslow and Mintz (1956) and follow-up work by Mintz (1956), student reactions to an "ugly" room (two half-windows, grey walls, an overhead bulb with dirty lampshade, and unattractive funiture) were compared to reactions to a "beautiful" room (two large windows with draperies, beige walls, indirect overhead lighting, and attractive furnishings).

> The results were dramatic: subjects in the ugly room had such reactions as monotony, fatigue, headaches, irritability, and hostility. Those in the beautiful room responded in opposite fashion: they had feelings of comfort, pleasure, enjoyment, importance, and the desire to continue their task. (Mintz, 1956, p. 168)

Flooring is significant, not only for the contribution it makes to the classroom noise level, but also to the feeling of warmth or coldness of that room. Carpet cuts down noise level. It may inhibit the type of activity carried out in a classroom, however, such as using paint or other messy materials.

The relationship between school achievement and classroom color has been researched by educators and psychologists. In an investigation by Ketcham (1958), kindergarten children were studied over a two year period and evaluated on social habits, health and safety habits, language arts, arithmetic, social studies, science, and music. Those attending a school painted in accordance with color dynamic principles showed much greater improvement in the above listed areas than did those attending an unpainted school.

The State Department of Education in Connecticut (1966) found in a series of studies, that in schools where color improvements were made not only did student pride increase but the incidence of behavior problems including vandalism decreased.

Colors affect perception of room size and warmth or coolness. In addition, color preference generally changes with age from warm to cool colors as the child grows older. Yellows, peach, and pink stimulate young children to explore, to learn, to participate; while green, blue-green, and gray are recommended for secondary schools to avoid distraction and aid in concentration (Thompson, 1973).

Color, intensity, and location of lights affect attitude and eye strain. Matching the lighting to the task would create an ideal situation; however, for our purposes the role played by inappropriate or insufficient lighting in a student's learning difficulties is the issue of primary concern.

Although aesthetic qualities may have little or no direct relationship to the problems of an individual student, they do affect the emotional tone of a classroom and thus may have indirect and exacerbating consequences for the student already under emotional stress.

Finally, attention should be paid to heating. Dr. Charles Higgins (Rosenfeld, 1977) advises that a temperature between 64° and 68° is most healthful, least fatiguing, and most conducive to learning. Exceptionally dry air may increase the risk of respiratory illness.

Bulletin boards communicate much about a classroom. They may reflect a teacher-centered or student-centered room depending on who designs and organizes them. As a frequent center for display of successful student work

they are often a source of continued embarrassment and defeat for a less able child. Content may be a stimulus for fantasy and daydreaming to one with emotional disabilities and complex or poor organization may confuse the student with perceptual problems.

Pupils supplies are provided by many methods including incorporation into a list of incentives in a token economy. They usually are valued by students and may become the focal point of controversy or theft among classmates. The condition they are in tells us something about the attitude and/or organizational skills of a student. Little attention seems to be paid to the type and condition of pencils, yet the skill for which they are tools, handwriting, is attended to and is greatly affected by their quality. Many students use writing instruments that are too tall, too short, too thin, unbalanced, too dull or too sharp. Chewed pencils may be a clue to a student's anxiety level.

Chalkboards are also valued by students as places to work and sometimes as things to clean. For the youngster with learning problems, they are sources of frustration. Reading and copying from a chalkboard for them is a strenuous task at best. High contrast of writing to background, low glare and legible handwriting may alleviate some of the stress of the task for such a student.

Noise level in a room may interfere with concentration or auditory perception of a student. A study to determine whether reading performance of students in a open-space school was adversely affected by naturally occurring background noise detected that the only effect was a slow-down in rate of performance (Weinstein and Weinstein, 1978). Cohen, Glass and Singer (1973) demonstrated significant correlations between noiseiness of a child's home environment and performance on auditory discrimination and reading test scores. They found that repeated noise exposure leads individuals to filter out disturbing sounds and, in the process, relevant speech sounds may also be screened out, thus affecting reading. Teaching time may be reduced by noise. A study by Kyzar (1977) showed that more than twice as much time was lost in classrooms on the heavy traffic side of a school building than on the opposite side. The subsequent time pressure and frustration to the teacher may negate his/her willingness to individualize instruction or management.

4. Time: The sequence in scheduling of subjects and activities, as well as their duration, may be a factor in the behavior problems of students. The length of time devoted to and the nature of activities used in teaching each subject should be geared to student needs. They usually are planned around normative developmental standards and may cause problems for the distractible or unmotivated student. For a student whose skills in self-control are undeveloped, sedentary activities that follow very active activities without a slowdown or transition may leave this student still wound up, while everyone else is wound down. fatigue may be a factor in behavior problems, as youngsters often become more active, more irritable and less tolerant when tired. The time of day, coupled with the activity type and task demand, may be in dissonance with the student's energy level.

B. Instructional Dimensions

Items in this section of the checklist deal with the way the teacher delivers instructions and the tools used in the delivery of instructions.

Instructional methods and materials reflective of teacher style are most effective when matched to the learning style of the student. Research on this dimension of the setting is prevalent and readily available. It is beyond the scope of this paper to deal with these items in detail. Most practitioners will have the skills and information necessary to render meaning to the data thus obtained. The key to the analysis is the appropriateness of the instructional approach and materials for the given learner, the variety of resources and equipment available for programming and the opportunity for individualizing instruction and management because of teacher attitude and material availability and appropriateness.

IV. SUMMARY AND CONCLUSION

> What any person in the world can learn, almost all persons can learn <u>if</u> provided with appropriate prior and current conditions of learning (Bloom, 1977).

If Bloom's premise is true, then the determination of the role played by the setting in the presenting concerns about a student is essential. The question lies in the handicap--is it the student's, the setting's or some other variable's? Identifying handicaps and placing students in special programs are grave businesses. Every effort must be made to rule in or rule out every aspect accessible to examination and analysis, not only to shed light on the nature of the problem, but to aid in the planning of meaningful interventions.

Bloom (1977) has emphasized the importance of measures of various learning environments as crucial for their accurate control, prediction and effective manipulation of learning outcomes. If theorists and researchers recognize the importance of the setting in a successful school experience, why is analysis of the environment relegated to a "luxury" position in a diagnostic process designed to intervene with those whose school experience is unsuccessful?

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SCALES AND ITEMS
OF THE
LEARNING ENVIRONMENT INVENTORY

A. Cohesiveness

1. Members of the classes do favors for one another.
2. A student has the chance to get to know all other students in my classes.
3. Members of my class are personal friends.
4. All students know each other very well.
5. Students are not in close enough contact to develop likes or dislikes for one another.
6. My classes are made up of individuals who do not know each other well.
7. Each student knows the other members of my classes by their first names.

B. Diversity

1. My classes have students with many different interests.
2. Interests vary greatly within my classes.
3. Some students are interested in completely different things than other students.
4. Class members tend to pursue different kinds of problems.
5. My classes divide their efforts among several purposes.
6. My classes are working toward many different goals.
7. Different students vary a great deal regarding which aspects of my classes they are interested in.

C. Formality

1. Students who break the rules are penalized.
2. My classes have rules to guide their activities.
3. Students are asked to follow strict rules.

Formality (continued)

4. My classes are rather informal and few rules are imposed.

5. There is a recognized right and wrong way of going about class activities.

6. All classroom procedures are well-established.

7. There is a set of rules for the students to follow.

D. Speed

1. The pace of my classes is rushed.

2. My classes have plenty of time to cover the prescribed amount of work.

3. Students do not have to hurry to finish their work.

4. There is little time for day-dreaming.

5. My class members feel rushed to finish their work.

6. My classes have difficulty keeping up with their assigned work.

7. The course materials are covered quickly.

E. Environment

1. The books and equipment students need or want are easily available to them in the classrooms.

2. A good collection of books and magazines is available in my classrooms for students to use.

3. The students would be proud to show their classrooms to a visitor.

4. My classrooms are bright and comfortable.

5. There are displays around my classrooms.

6. My classrooms are too crowded.

7. There is enough room for both individual and group work.

F. Friction

1. There is constant bickering among class members.

2. Certain students have no respect for other students.

Friction (Continued)

3. There are tensions among certain groups of students that tend to interfere with class activities.

4. Certain students in my classes are responsible for petty quarrels.

5. Certain students don't like other students.

6. Certain students are considered uncooperative.

7. There is an undercurrent of feeling among students that tends to pull my classes apart.

G. Goal Direction

1. My classes know exactly what they have to get done.

2. The objectives of my classes are not clearly recognized.

3. Students have little idea of what my classes are attempting to accomplish.

4. The objectives of my classes are specific.

5. Each student knows the goals of the courses.

6. My classes realize exactly how much work they have to do.

7. Each student is my classes has a clear idea of the class goals.

H. Favoritism

1. The better students' questions are more sympathetically answered than those of the average students.

2. All the students in my classes enjoy the same privileges.

3. The better students are granted special privileges.

4. Only the good students are given special projects.

5. My classes are controlled by actions of a few members who are favored.

6. Students who have past histories of being discipline problems are discriminated against.

7. Certain students are favored more than the rest.

I. Cliqueness

1. Certain students work only with their close friends.
2. Students cooperate equally with all class members.
3. Some students refuse to mix with the rest of their classes.
4. Some groups of students work together regardless of what the others in the classes are doing.
5. Certain groups of friends tend to sit together.
6. Most students cooperate equally with other class members.
7. Certain students stick together in small groups.

J. Satisfaction

1. The students enjoy their class work.
2. Personal dissatisfaction with my classes is too small to be a problem.
3. Many students are dissatisfied with much that my classes do.
4. There is considerable dissatisfaction with the work of my classes.
5. The members look forward to coming to class meetings.
6. After my classes, the students have a sense of satisfaction.
7. Students are well-satisfied with the work of my classes.

K. Disorganization

1. There are long periods during which my classes do nothing.
2. The work of my classes is frequently interrupted when some students have nothing to do.
3. My classes are well organized.
4. The classes are disorganized.
5. My classes are well-organized and efficient.
6. Many class members are confused by what goes on in my classes.
7. There is a great deal of confusion during class meetings.

L. Difficulty

1. The work in my classes is difficult.
2. Students are constantly challenged.
3. The subject studied requires no particular aptitude on the part of the students.
4. Students in my classes tend to find the work hard to do.
5. The subject presentations in my classes are elementary for many students.
6. Most students consider the subject matter easy.
7. Many students in the school would have difficulty doing the advanced work of my classes.

M. Apathy

1. Failure of my classes would mean little to individual members.
2. Students don't care about the future of the class as a group.
3. Members of my classes don't care what the class does.
4. Students share a common concern for the success of my classes.
5. Most students sincerely want my classes to be a success.
6. Failure of my classes would mean nothing to most members.
7. Students have a great concern for the progress of my classes.

N. Democratic

1. Class decisions tend to be made by all the students.
2. Decisions affecting my classes tend to be made democratically.
3. Certain students have more influence on my classes than others.
4. Certain students impose their wishes on the whole class.
5. Each member of my classes has as much influence as any other member.
6. What my classes do is determined by all the students.
7. A few members of my classes have much greater influence than the other members.

O. Competitiveness

1. Most students want their work to be better than their friends' work.
2. Students compete to see who can do the best work.
3. A few of the class members always try to do better than the others.
4. Students feel left out unless they compete with their classmates.
5. Most students cooperate rather than compete with one another.
6. There is much competition in my classes.
7. Students seldom compete with one another.

ENVIRONMENTAL CHECKLIST

Student's Name _____ Age _____

School _____ Grade _____

Teacher _____ Observer _____

Date _____ Time _____ to _____

DIRECTIONS: Check all items that apply. Keep in mind that the analysis is of the environment of the designated student and not of the classroom in general.

I. LEARNING SETTING

A. General Information

1. Type of Classroom:
   ___Self-contained ___Open-space ___Team-teaching

2. Person in charge:
   ___Regular teacher ___Student teacher ___Other (Specify) _____
   ___Substitute ___Teacher aide _____

3. Time of day: ___A.M. ___P.M.
   Half of Perod: ___first ___second

4. Number of students ___ Number of adults ___ Ratio ___to ___

5. Subject Being Taught at Time of Observation: (If more than one, number in order of sequence)

___Reading	___Language	___Handwriting
___Math	___Music	___Health/Safety
___Spelling	___Art	___P.E.
___Social Studies	___Science	___Other_____ (Specify)

6. Activity in Progress: (If more than one, number in order of sequence)

___Teacher lecture	___Seatwork	___Film
___Small group	___Student Directed	___T.V.
___General class discussion	___Demonstration	___Lab
	___Test	___Learning Center Activity
___ Question & answer	___Independent student project	___Other_____ (Specify)

B. Space

1. Seating Arrangement: Please diagram and mark the designated pupil's seat with an "X". Indicate youngsters in adjacent seats by name and/or sex.

Number of boys ___ Number of girls ___

Check ( ) if seat is next to:

___Bulletin board ___Teacher's desk ___Windows

___Bookshelves ___Learning Centers ___Chalkboard

___Door to _____ ___Heating/A.C. unit

Visible from teacher's desk ___Yes ___No

2. Spatial Areas

___Learning centers ___Isolation booths

___Study areas ___Free reading areas

___Other (specify) _____

3. Room in relation to:

Bathrooms: _____

Drinking fountains: _____

Principal's office: _____

Nurse's office: _____

Access to outside: _____

Media Center: _____

Clothes hooks, lockers, coathall (describe): _____

_____

Rooms next door are: _____

_____

C. Props

1. Furnishings

a. Pupil's desk:

___Correct size ___Too large ___Too small

Individual

Type: Attached ___Individual table, or desk with chair

___Right handed

___Left handed

Cluster

___Table w/chairs ___Number in cluster

___Desks w/chairs

Pupil's desk and/or work area: ___Orderly ___Messy

b. Pupil's chair:

___Correct size ___Movable

___Too large ___Immovable

___Too small

c. Flooring:

___Wood ___Tile ___Carpet

d. Lighting of room:

___Incadescent ___Adequate

___Flourescent ___Inadequate

2. Bulletin Boards

___Teacher made ___Pupil made ___Commercial

Content (describe):_____

_____

Arrangement (describe):_____

_____

3. Windows

a. Location

___In door to hall
___Along wall (east, west, north, south) - underline one
___Near ceiling (outside wall, hall wall) -underline one

b. Number ___
c. Size: ___Large ___Small ___Floor-ceiling

4. Wall Color: _____ Wall Surface: a.___wood b.___brick c.___acoustic tile d.___other

5. Ventilation: ___Comfortable ___Stuffy ___Hot ___Chilly

*6. Pupil's Supplies:

a. Pencils: ___correct size ___too short ___too long ___sharpened ___dull ___own supply ___available from teacher

b. Crayons: ___complete set (8 basic colors) ___incomplete set ___in good condition ___broken ___own supply ___available from teacher

c. Marking pens: ___own supply ___available from teacher

d. Drawing paper: ___manilla ___newsprint ___own supply ___available from teacher

e. Writing paper: ___wide lined ___narrow lined ___no lines ___own supply ___available from teacher

f. Scissors: ___Right handed ___Left handed

7. Chalkboard: ___Metal ___Slate ___White ___Green ___Black ___White chalk ___Yellow chalk ___Marking pens ___Board not well erased
___Writing legible on board ___Writing too small
___Writing illegible ___Writing too light

8. Extraneous or obtrusive noise which might interfere with/pupil concentration General room noise level:___high___medium___low
Specific room noises:
___squeaking chair
___creaking radiator
___banging pipes
___dripping faucets
___scraping chairs
___squeaking doors
___rustling venetian blinds
___flapping window shades
___whirring fan
___other (indicate what)

D. Time

Schedule

SUBJECT	ACTIVITY	DURATION
		to
		to
		to
		to
		to
		to

*Data to be obtained in interview with the teacher.

II. INSTRUCTIONAL DIMENSIONS

A. Instructional Methods and Teacher Characteristics

1. Sex of teacher: ___Male ___Female

2. Instructional Methods

a. Content:
Time:
Teacher Placement in Classroom:
Number of students not attending:
Number of contacts with students when lesson is completed:

b. Direction giving
___Highly specific, exact
___Multisensory
___Demonstration
___One step at a time
___Multistep

Teacher's speech and voice:
___loud
___soft
___well modulated
___good articulation
___poor articulation
___good voice quality
___poor voice quality
___readability of lips

*c. Evaluation of work
___Pupil evaluated
___Teacher evaluated
___Group evaluated
___Not evaluated
___Correction of errors expected
___Encouragement, concern about errors shown
___Improvement suggested constructively

d. Correction/Marking Method
___number wrong
___number correct
___%
___verbal comments, positive
___verbal comments, negative
___wrong answers marked
___correct answers marked
___both

*Feedback:
___that day ___on the spot ___next day ___later in activity

How much?_____

*e. Teacher's out of class availability to students:
___Between classes, periods
___After school
___Lunchtime
___Recess
___Before school
___Other (specify)_____
_____

3. Work with pupils
___Total group ___Small group ___Individual
Teacher mobility:
___faces children when speaking
___moves while speaking
___uses large hand gestures while speaking
___other (indicate what)

4. Positive Comments by Teacher:

Time:_____Number:_____Examples:_____

Negative Comments by Teacher:

Time:_____Number:_____Examples:_____

B. Lessons

1. Assignments

___single topic assignment for all
___variety for individual interests
___same difficulty level ___too hard ___too easy
___variety for individual differences
___same resources recommended to all
___variety recommended
___same assignment length for all ___too long ___too short
___length varied for individual differences
___assignment length appropriate

*2. Homework

___assigned to everyone
___only to slow students
___only to accelerated students
___as appropriate
___daily
___not at all
___parent involvement discouraged
___parent involvement encouraged
___parent involvement made explicit
___supplemental work
___reinforcement
___error correction

*C. "Traffic Regulation System" (Class rules/procedures)

Entry into room:_____
Dismissal during hour for special needs:_____
_____
Dismissal at end of class period:_____
Pupil to pupil communication:_____
Materials passed out, collected:_____
_____
Pencil sharpening:_____
Transitional times:_____
Use of interest centers:_____
Clean up:_____
Obtaining free materials:_____
Stretch breaks:_____
Enforcement system: ___student monitors ___teacher ___both
Rules clear to students?: ___Yes ___No ___Posted
Rules/Procedures observed? ___consistently ___inconsistently

Rules made by: ___teacher ___students ___mutual agreement
___school

D. Media Resources

1. Type available

___Basic texts

___Workbooks

___Supplementary texts

___Library books

___Reference books
___Encyclopedias
___Dictionaries
___Thesauri
___Almanacs
___Atlases

Other: _____

___Games, puzzles

___Kits (i.e., reading, math, science)

___Charts, posters, study prints

___Models, Diorama, specimens, Realia

___Filmstrips

___2x2 Slides

___16 mm Films

___8 mm Films

___Records
___Audiotapes
___Cassettes
___Open reel
___Videotapes

___Transparencies (overhead)

___Maps

___Globes

___Toys
___Cards, flash or audio

2. Equipment (Appropriate for materials)

___Television set
___Videotape Recorder
___Filmstrip/slide projector
___Filmloop projector
___16 mm Film projector
___8 mm Film projector
___Overhead projector
___Tachistoscope
___Screen

___Room darkening facilities (Drapes-shades)
___Filmstrip previewer

___Record player
___Audiotape recorder
___Cassette
___Open reel
___Audiotape player
___Earphones/headsets (No.___)
___Listening Center/Jackbox
___Audio patch cards
___Audiocard reader (Lang. Master, EFI)
___Flannel board
___Chalkboards
___Bulletin boards

Other:_____

_____

_____

THE USE OF BEHAVIOR RATING SCALES IN THE IDENTIFICATION OF EMOTIONALLY DISABLED PUPILS

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BEHAVIOR RATING SCALES

The use of behavior rating scales appears to be rapidly gaining acceptance as part of the assessment process in accurately identifying and programming for children with emotional disabilities. Under pressure from mandated legislation, special education support personnel are scrambling to adopt assessment methods to document eligibility for special class placement and to find means to evaluate their interventions. This same federal legislation protects both the parent and the student against misdiagnosis and unwarranted special class placement. It also delineates a legal process to critically evaluate programming interventions. Education support staff members, after absorbing a few due process shocks along the way, are becoming somewhat hesitant to make placement recommendations without adequate means of documentation. However, the issue of validity, reliability and predictability of many such instruments remains questionable (Schultz, Manton & Salvia, 1972; Spivack & Swift, 1973).

The recent preference in the identification process of emotionally disabled youngsters has been to reduce the scope of pure subjective guesswork in favor of documentable evidence that supports eligibility for placement. The identification concerns have been recently underscored by legislation mandating special education services for all handicapped children.

Frequently employed in that identification process are the inclusion of teacher-administered rating scales. Ratings of students' actions, capabilities and manifested problems on scales can be a major contributing source of information for supporting diagnosis and for planning for interventions. These rating scales are prolifically published with approximately 200 various instruments available. Unfortunately, sophistication in the use of sound principles of measurement has not necessarily kept pace with the writing and implementation of these instruments.

It must be remembered that these behavior rating scales should comprise part of a battery of assessment tools. The decision for placement into an emotional disabilities program should not rest only on the data collected from a behavior scale. However, the professional judgment of the staffing team members is likely to be more sound if they are provided with objective data as well as subjective impressions. There are no formal tests to determine whether or not children are emotionally disabled.

The intent of this chapter is to focus on 10 commercially available or high utility rating scales that specifically require classroom teacher compilation. There is no doubt that the scales selected have been biasly selected by the author due to personal familiarity and the availability of research literature on their use. These scales are by no means inclusive of those that are appropriate and available, and therefore, leave a major area to explore and research.

Through the writing and research in this chapter, it is hoped that the consumer of behavior rating scales will become more aware of the various

components used in their design. Areas of misuse are highlighted and methods for implementation will be outlined.

THE DESIGN OF BEHAVIOR RATING SCALES

Most of the available behavior rating scales are of a descriptive nature rather than a prescriptive classification scheme. The scales and checklists are descriptive in that they indicate a particular behavior exists in that child's repertoire of behaviors. The items generally selected to describe the child's particular behaviors are chosen from an item universe of descriptors generally contributed either by classroom teachers (Walker's P.B.I.C., Swift & Spivack's D.E.S.B., D.A.B., D.C.B) or frequently mentioned in clinical records of referred or diagnosed children (Cassell's C.B.R.S., Rutter's C.S.B., Rubin's B.C., Peterson-Quay's B.P.C., Dayton's P.C.B.S., Jesness' B.C., Burks' B.R.S., Ross' P.A.S.C.). The items are then refined and factor-analyzed to reflect a workable, reliable instrument.

Generally, the items comprising the behavior rating scales are measured in continuums to differentiate varying degrees of that item. The description of the scale units may consist of (1) points, (2) numbers, or (3) descriptive phrases placed on the continuum such as "almost always, frequently, occasionally, rarely, almost never."

Behavior Clusters

Most instruments group contributing or component behaviors into domains or dimensions of highly intercorrelated behaviors. These behavior domains are based on factor-analysis studies. The multivariate approach uses complex statistical procedures to reveal which behaviors tend to occur together (Quay, Morse & Cutler 1966; Pimm, Quay & Werry 1967; Spivack & Swift 1966; Swift et al 1972; Jesness 1974).

Herbert Quay and his colleagues' studies of behavioral dimensions frequently appear in literature and seem to be the most noteworthy in this area. They have identified three behavioral dimensions labeled conduct problem, inadequacy or immaturity and personality problems. These three dimensions have proved to be remarkably stable and reliable (Quay 1972, 1975; Quay, Morse & Cutler 1966; McCarthy & Paraskevapoulos 1969.)

Suggested in Swift & Spivack's 1973 critical review of teacher administered rating scales are five behavior clusters measured by most scales. The dimensions are what the authors consider a purely rationale basis of at least superficial similarity. The behavior clusters summarized are:

> Group I consists of active, outerdirected behaviors that usually cause management problems in class or at least usually call forth controlling responses from teachers.
>
> Group II is comprised of more recessive behaviors, reflecting anxiety, social withdrawal, timidity or unhappy inner experiences.

Group III encompasses dimensions tapping adaptive behaviors in the classroom.

Group IV describes dimensions that are relatively specific to cognitive functioning.

Group V is viewed as merely an "other" category.

Table #1 relates how the 10 behavior scales selected for this study compare to each of the five behavior clusters delineated by Swift & Spivack's research. This table may be used as an initial guide to the potential scale consumer. It is important to underscore the fact that these clusters or groups of behaviors only serve to be descriptive and are not diagnostic.

Table 1

BEHAVIOR DIMENSIONS MEASURED

BEHAVIOR CLUSTERS	Burks	Cassell	Dayton	Jesness	Quay	Ross	Rubin	Rutter	Swift/ Spivack	Walker
Group 1	X	X	X	X	X	X	X	X	X	X
Group 2	X	X		X	X	X	X	X	X	X
Group 3	X		X	X		X			X	
Group 4	X						X		X	
Group 5		X	X	X	X	X	X	X	X	X

Burks - Behavior Rating Scales
Cassell - Child Behavior Rating Scales
Dayton - Pupil Classroom Behavior Scale
Jesness - Behavior Checklist
Quay - Behavior Problem Checklist
Ross - Pittsburgh Adjustment Survey Scales
Robin - Behavior Checklist
Rutter - Child Scale "B"
Swift/ Spivack - Devereux Child Behavior Rating Scale
- Devereux Elementary School Behavior Rating Scale
- Devereux Adolescent Behavior Rating Scale
Walker - Problem Behavior Identification Checklist

SUPPORTIVE DATA FOR USING BEHAVIOR RATING SCALES

Validity

One of the more important factors that the consumer should be concerned with is the evaluation of the validity, reliability and generalization potential of the behavior rating scale. This is where the sophistication in the use of sound principles has faltered.

If a scale is valid, it should yield truthful results. If a scale score indicates that a particular student resembles a certain behavior cluster, how accurate or supportive is that statement? There are three types of validity to be concerned with - content, construct and predictive. To establish content validity the scale constructor analyzes the content of the factor that he intends to appraise and sets about designing a scale to measure various aspects of that content. Teachers and support personnel are most frequently requested to aid in determining content validity.

The validity of the scales' ability to provide support for behavior clusters is measured through construct validity. Provided that the criterion items are reliable, concurrent or predictive related validity takes the form of a simple correlation coefficient. In correlating student's scale scores in relationship to specified behavior clusters, we are attempting to design a system of classification that may in the future enable us to predict which specific methods of intervention could be successful. The alternative is an educational methodology that relies on attempts to fit interventions to disorders by random choice, intuition, or trial and error (Kauffman 1977).

Reliability

A particular scale is seen as reliable if it consistently yields similar results when repeated measurements are taken of the same subjects under similar conditions. Two methods of measuring reliability are of importance to the consumer: (1) test-retest reliability and (2) inter-rater reliability.

In the first method, test-retest reliability, a group of teachers are requested to complete the same instrument over a designated period of time on the same youngster. If the scales compare closely, the scale is said to have reliability. In the second method, a behavior scale is said to have inter-rater reliability if two or more individuals who have maximum contact with the student have similar scale score results.

Throughout the literature one encounters the expected pattern of teacher bias which simply characterizes tasks requiring human judgment of other humans (Paxton 1968, Glass 1967, Eaves 1975, Touliatos & Lindholm 1975). Biases appear to center around specific grade levels, teacher and student, sex and race, achievement, social class and teacher expectations. All these factors can interfere with inter-rater reliability.

Normative Data

Available normative data is also a critical issue for the consumer to consider in selecting a behavior scale. Such information is of benefit in attempting to compare student scores with the obtained scores of students having significant behavior problems. The majority of the commercially produced behavior scales were normed on behaviorally deviant students.

Table 2 was designed to assist the consumer in comparing availability of supportive data among the various behavior scales listed. The table compares each scale with the availability of reliability, validity and normative data. It also compares each scale with achievement and intelligence quotients. The achievement criterion is not as frequently available as the other data but there appears to be a correlation between teachers' ratings relative to achievement (Miller 1972; Spivack, Swift & Prewitt 1971; Lambert & Hartsough 1973). Studies indicate that teachers appear to rate along academic competency dimensions and that deviant behavior is judged in terms of its interference with academic achievement.

Table 2

AVAILABILITY OF SUPPORTIVE DATA

	Reliability		Validity Correlation			Norms	IQ
Scales	Test/ Retest	Rater	Mental Health	Academic Test Scores	Construct		
Burks	.60's		X				X
Cassells	*		X			X	
Dayton	.50's			X		X	
Jesness	.40's	.40's			X	X	
Quay	**	.70's	X			X	
Ross	**	.80's	X			X	X
Rubin			X	X	X		
Rutter	.80's	.70's	X				
Spivack	.80's	.60's	X	X	X	X	X
Walker	.60's		X			X	

**factors available but not specified
*reliability mentioned in manual but not specific to text/retest or rater reliability.

Burks	- Behavior Rating Scales
Cassell	- Child Behavior Rating Scales
Dayton	- Pupil Classroom Behavior Scale
Jesness	- Behavior Checklist
Quay	- Behavior Problem Checklist
Ross	- Pittsburgh Adjustment Survey Scales
Rubin	- Behavior Checklist
Rutter	- Child Scale "B"
Swift/ Spivack	- Devereux Child Behavior Rating Scale Devereux Elementary School Behavior Rating Scale Devereux Adolescent Behavior Rating Scale
Walker	- Problem Behavior Identification Checklist

USES OF BEHAVIOR RATING SCALES

Assisting in the identification of potential emotionally disabled children and adolescents and their differentiation from average behaved students appears to be one of the more useful purposes of behavior rating scales. In addition, behavior rating scales can provide necessary documentation to support placement when used as part of the assessment battery. Other uses can be to assist in the preparation of programming goals to use as an aid in designing interventions, and as a pre/post measurement instrument in evaluating interventions.

Identification Process

Supporting the use of rating scales as part of the identification process are studies reported by McCarthy & Paraskevapoulos (1969). These studies show that the emotionally disabled children used in the studies exhibited more problems on a behavior checklist than did learning disabled or average children. Identification of disabled students is frequently accomplished, at least initially in the diagnostic process, by checklists and rating scales (Bower 1969; Quay & Peterson 1975; Reinert 1975). These instruments generally have suggested cutoff scores based on data collection. A child who scores "too many" of the behaviors indexed on the rating scales is frequently a candidate for emotional disability programs (Algozzine 1977).

Obviously, the classroom teacher has the maximum contact with the student being referred and should be asked to complete the behavior rating scale. Since all the ramifications of P.L. 94-142 are being digested as part of educational policy, the value, impact and importance of teacher perceptions have become intensified.

Research supports teacher judgments of the student's behavior as being relatively effective and reliable, and also an efficient means of selecting potentially emotional disabled students (Balow 1966; Glavin & Quay 1969; Morse & Dyer 1963).

A study examining the corelations between teachers' ratings of childrens' behaviors and self-expressed concerns on personality questionnaires supports the validity of teacher perceptions in identifying potential emotionally disabled youngsters (Harris, Drummond & Schultz 1977).

Through experience, teachers appear to have difficulty attaching descriptors to observed behaviors. Typically, teachers refer to such students as troublemakers and instigators, stating their behaviors "drive them up the wall" or make references to unusual, bizarre behaviors. Therefore, through combining behavior rating scales that already use behavior descriptors and teacher evaluations of those descriptors, we would be attempting to increase the accuracy of their statements. In addition it provides a standard means of describing and communicating the overt behavior symptoms.

Programming Goals

A behavior rating scale, completed by the referring classroom teacher, assists the placement staffing team in pinpointing undesirable behaviors that need to be extinguished. The undesirable behaviors will become the focal point for the intervention plan. The staffing team can attempt to zero in on at least five of the most significant behavior concerns the "giving" teacher has expressed.

An example: In the use of the Devereux Elementary School Behavior Rating Scale, the "giving" teacher might have indicated the following as areas of most concern to him|her:

(1) Prone to blame the teacher, the test, or external circumstances when things don't go well.

(2) Unable to change from task to task without getting upset.

(3) Makes irrelevant remarks during discussions and tasks.

(4) Interferes with the work of his|her peers in class.

(5) Slow to complete his|her work.

These now become the target behaviors to rechannel, extinguish, remediate or camouflage. If these areas can be improved upon, the "giving" teacher will be more willing to accept the student back into the room and the integration goal becomes more attainable.

During the child's intake staffing, these five identified behaviors should be reworded for the desirable outcomes and stated as the short term objectives under the umbrella goal "develop acceptable and responsible classroom behavior" and specified in the individualized education program. (IEP).

Designing Intervention Plans

Let's assume the staffing team has capitalized on establishing placement goals based on the most significant or deviant items on the behavior rating scale. They will find these same items, after being rewritten for the desirable outcomes, can be incorporated into a point card or contingency management system as an intervention technique.

Using items indicated as of most concern to the classroom teacher, the special program teacher can design a point card for monitoring the desirable behaviors. After rewording the behavior items to desirable outcomes and writing them in a manner clear enough for the student to understand, they are listed on a card and evaluated in regular intervals during task performance. The evaluation monitors the desirable behaviors and provides clear behavior expectations for the student. As the student progresses toward his|her placement goal of developing acceptable classroom behaviors, the tallied point

cards provide documentation that can be used to justify termination from the program and return to the regular class.

Pre/Post Measurement Instrument

If the completed behavior rating scale is viewed as characteristic of the entering behavior of the student and the significant deviant behaviors have been reviewed, identified and rewritten as desirable outcome objectives, then the placement intervention outcomes can be measured by a post-behavior rating scale.

The original pre-intervention behavior rating scale can be critically compared with the post-intervention scale to measure areas of improvement and to evaluate programming objectives.

Purported Areas of Use

In addition to encouraging the use of behavior rating scales as part of the identification process, an assistance in developing program objectives, an aid in developing an intervention plan and a method for assessing intervention effectiveness, the authors of commercially available checklists endorse their scales for a variety of other uses.

Ten behavioral rating scales and checklist manuals were surveyed to ascertain the author's intentions for using the scales. Twelve summarized use statements were derived. All the commercially available manuals clearly stated a purpose for using the scales. The three most frequent uses mentioned were:

(1) As a systematic method of describing student behaviors.

(2) As a research tool when a behavior criterion is required.

(3) As a means of identifying patterns of disordered behaviors.

The uses and the manuals that endorsed them are summarized in Table 3.

Table 3

PURPOSES FOR EMPLOYING BEHAVIOR RATING SCALES

	Burks	Swift & Spivack	Quay Peterson*	Cassell	Jesness	Dayton*	Pittsburgh*	Walker	Rutter*	Ross et al*
1. As a systematic method of describing student behavior.	X	X		X	X		X	X		
2. As a method of assessing behavioral change to treatment or environmental intervention.	X	X				X				
3. As a standard means of providing information for parents at staffings and conferences.	X	X		X						
4. As a comparative instrument with other populations having significant behavior deviances.				X						
5. As a means of identifying patterns of disordered behaviors.	X		X		X		X			
6. As one measurement of identifying the need for intervention.						X	X			
7. As a research tool when a behavior criterion is required.		X		X		X	X			
8. As a means of prescriptive planning and goal setting.					X					
9. As a means of indicating areas in a child's personality where further evaluation might take place.	X									
10. As a means of prediction for doing well in a special class placement.	X									
11. As a means of gauging the severity of behavior symptoms.			X	X						
12. Other.										

*manual not commercially available.

The consumers were then surveyed to gain an indication of how they would evaluate the purported values of using behavior rating scales. The survey was comprised of the same items referred for use in the various manuals with an additional item included being "as a method of documenting situationally inappropriate behaviors." The consumer group was composed of Area Education Agency - Emotional Disability support team members from throughout the state of Iowa. The support team members consisted of school psychologists, school social workers and program-specific consultants. The participants were asked to rate each of the twelve use statements in terms of having "little value" or "frequent value". The results of those indications can be found in Table 4.

The survey results indicate one unanimous area of agreement among all three disciplines - there is little value for using a behavior scale as a means of prediction for doing well in a special class placement.

The raters of the survey indicated frequent value for use of behavior rating scales in the following areas:

(a) As a systematic method of describing student behavior.

(b) As a standard means of providing information to parents at staffings and conferences.

(c) As a means of identifying patterns of disordered behaviors.

(d) As one measurement of identifying the need for intervention.

(e) As a means of guaging the severity of behavior symptoms.

Table 4

USE OF BEHAVIOR CHECKLIST SURVEY

	Consultants		Psychologists		Social Workers		Components	
	Little Value	Frequent Value	Little Value	Frequent Value	Little Value	Frequent Value	Little Value	Frequent Value
1. As a systematic method of describing student behavior.	.33	.67	.23	.77	.25	.75	.27	.73
2. As a method of assessing behavioral change to treatment or environmental intervention.	.60	.40	.54	.46	.54	.46	.55	.45
3. As a standard means of providing information for parents at staffings and conferences.	.25	.75	.15	.85	.50	.50	.30	.70
4. As a comparative instrument with other populations having significant behavior deviances.	.90	.10	.69	.31	.64	.36	.73	.27
5. As a means of identifying patterns of disordered behaviors.	.00	1.00	.08	.92	.36	.64	.16	.84
6. As a method of documenting "situationally inappropriate behaviors."	.25	.75	.13	.87	.70	.30	.43	.57
7. As one measurement of identifying the need for intervention.	.10	.90	.15	.85	.17	.83	.15	.85
8. As a research tool when a behavior criterion is required.	.90	.10	.58	.42	.82	.18	.84	.16
9. As a means of prescriptive planning and goal setting.	.50	.50	.50	.50	.50	.50	.50	.50
10. As a means of indicating areas in a child's personality where further evaluation might take place.	.22	.88	.69	.31	.27	.73	.42	.58
11. As a means of prediction for doing well in a special class.	1.00	.00	1.00	.00	1.00	.00	1.00	.00
12. As a means of gauging the severity of behavior symptoms.	.37	.63	.23	.77	.36	.64	.31	.69

CONCLUDING COMMENTS

The author of this chapter intends to endorse the use of behavior checklists and rating scales. It is hoped this chapter will serve as a guide to the potential consumer in selecting particular scales. The consumer should select instruments that have detailed manuals clearly specifying supportive validity, reliability and predictability evidence. The consumer should also be aware of the scale's design, normative data, standardization tables and usability.

Most of the available behavior rating scales are not viewed as diagnostic but descriptive in nature in that they simply indicate a particular behavior exists. They can be used as a means of gauging the severity of behavior symptoms. Most instruments group contributing or component behaviors into domains of highly intercorrelated behaviors based on factor analysis.

Research in literature has been critical about the lack of standardization, inadequate validity, reliability and predictability scores of these instruments. This needs to be seen in its proper perspective. Identifying a child as having emotional disabilities based on the scores of a behavior rating scale is totally invalid and unsupported in research. However, it appears the scales do serve a useful purpose. When used as part of an assessment battery they aid in providing documentation to support placement decisions by demonstrating the deviancy of the student's observable behaviors with his classmates. The scales have proved remarkably stable and reliable in aligning identified behaviors into various factor-analyzed clusters of related behaviors. Behavior rating scales can assist in the preparation of programming goals, can be used as an aid in designing interventions, and can be employed as a pre-post measurement instrument in evaluating interventions. In addition, they provide a standard means of describing and communicating student behavior to parents and support personnel.

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APPENDIX

APPENDIX A

BEHAVIOR SCALES APPLICABILITY AT GRADE LEVEL

	Grade Levels											
Behavior Scales	1	2	3	4	5	6	7	8	9	10	11	12
Burks	X	X	X	X	X	X	X	X				
Cassell	X	X	X									
Dayton	X	X	X	X	X	X	X	X	X	X	X	X
Jesness							X	X	X	X	X	X
Quay	X	X	X	X	X	X	X	X				
Ross	X	X	X	X	X	X						
Rubin	X	X	X	X	X	X						
Rutter	X	X	X	X	X	X						
Spivack	X	X	X	X	X	X	X	X	X	X	X	X
Walker				X	X	X						

Burk's - Behavior Rating Scales
Cassell - Child Behavior Rating Scale
Dayton - Pupil Classroom Behavior Scale
Jesness - Behavior Checklist
Quay - Behavior Problem Checklist
Ross - Pittsburgh Adjustment Survey Scales
Rubin - Behavior Checklist
Rutter - Child Scale "B"
Spivack - Devereux Child Behavior Rating Scale
Devereux Elementary School Behavior Rating Scale
Devereux Adolescent Behavior Rating Scale
Walker - Problem Behavior Identification Checklist

APPENDIX B

Available Behavior Rating Scales and Checklists For Use With Emotionally Disabled Students

BEHAVIOR PROBLEM CHECKLIST

-Devised by H. Quay & D. R. Peterson

-Not commercially available. The manual is available through contacting:

Dr. Herbert Quay
Department of Applied Social Sciences
University of Miami
Coral Gables, Florida 33124
Phone: 305-284-2380

-Comments: This scale has been the most widely researched scale in literature. It appears to be most reliable and stable in its pervasive behavior dimensions. In addition, data from group studies is accumulating which relate dimensions of behavior to important etiological variables. As of yet, however, for prediction and aid in treatment planning, the utility of the dimensional approach requires much additional research. The research done in the development and subsequent use of the checklist suggests that a reasonable, reliable measurement tool has been created that differentiates between children with emotional or specific learning disabilities and the normal population. It is quick and easy to use.

BURKS' BEHAVIOR RATING SCALES

-Devised by H. F. Burks

-Preschool and kindergarten; grades 1-8

-Available from:

Arden Press
8331 Alvarado Drive
Huntington Beach California 92646

-Cost: manual $5.50; set of 25 tests $6.25

-Rated by teachers or parents in 20 areas: self blame, anxiety, withdrawal, dependency, ego strength, physical strength, coordination, intellectuality, academics, attention, impulse control, reality contact, sense of identy, suffering, anger control, sense of persecution, sexuality, aggressiveness, resistance, social conformity.

-Comments: Ratings are scaled on a profile clustering each category into not significant, significant, very significant. Burks' Behavior Rating Scales have shown some ability to: 1) identify patterns of disturbed behavior which distinguish between several groups of children, 2) show changes in behavior patterns over a period of time, 3) indicate personality areas where further evaluation of the child might advantageously take place and 4) provide a source of material to school personnel for conferences with parents.

THE CHILD BEHAVIOR RATING SCALE

-Devised by N. N. Cassell

-Grades K-3

-Rated by teachers or parents

-6 adjustment scores: self, home, social, school, physical, total.

-Available from:

Western Psychological Services
12031 Wilshire Boulevard
Los Angeles, California 90025

-Price: Scale (25 per package) $6.50
Manual $2.00

-Comments: Consists of 78 brief statements to be rated by someone familiar with the child, on a scale of values ranging from "yes" to "no". Provides a total personality adjustment score. Standardized on 2,000 normal and 200 emotionally disabled children.

DEVEREUX ADOLESCENT BEHAVIOR RATING SCALE

-Devised by G. Spivack & M. Swift

-Normal and Emotionally Disturbed ages 13-18

-Available from:

Devereux Foundation Press
Devon, PA 19333
Phone 215-687-3000

-Price: 1 package of tests (25) $4.50 (includes 1 manual)

-Assesses: 12 factor scores: unethical behavior, defiant-resistive, domineering-sadistic, heterosexual interest, hyperactive expansive, poor emotional control, need approval and dependency, emotional distance, phys-

ical inferiority-timidity, schizoid withdrawal, bizarre speech and cognition. Three cluster scores (inability in delaying, paranoid thought, anxious self blame).

-Comments: Should fill a useful function. The instrument can be recommended for use with diagnosed groups of disturbed chidren and as an aid in identifying disturbed children.

DEVEREUX CHILD BEHAVIOR RATING SCALE

-Age 8-12

-For use by parents or others who had "intimate" living arrangements with the child over a period of time.

-Devised by G. Spivack & M. Swift

-Available from:

Devereux Foundation Press
Devon, Pennsylvania 19333
Phone 215-687-3000

-Price: 1 package of tests (25) $4.50 (includes manual)

-Problem Behaviors: Distractibility, poor self care, pathological use of senses, emotional detachment, social isolation, poor coordination and body tonus, incontinence, messiness-sloppiness, inadequate need for independence, unresponsiveness to stimulation, proneness to emotional upset, need for adult contact, anxious-fearful ideation, "impulse" ideation, inability to delay, social aggression, unethical behavior.

-Comments: As a classification instrument used for assigning children to groups or for assessing behavioral changes, the Devereux Child Behavior Rating Scale offers a moderately useful technique. The lack of additional research on the validity of the Devereux Child Behavior Rating Scale hampers its utility.

DEVEREUX ELEMENTARY SCHOOL BEHAVIOR RATING SCALE

-Grade K-6

-Devised by G. Spivack & M. Swift

-Available from:

Devereux Foundation Press
Devon, Pennsylvania 19333
Phone 215-687-3000

-Price: 1 package of tests (25) $4.50 (includes a manual)

-Problem Behaviors: classroom disturbance, impatience, disrespect-defiance, external blame, achievement anxiety, external reliance, comprehension, inattentive-withdrawn, irrelevant-responsiveness, creative initiative, need for closeness to the teacher.

-Comments: a sophisticated and carefully developed scale. Behaviors are clearly defined. Will aid in communication about the behavior of a child.

JESNESS BEHAVIOR CHECKLIST

-Devised by C. F. Jesness

-Appropriate for use with grades 7-12

-Available from:

Consulting Psychologist Press, Inc.
577 College Avenue
Palo Alto, California 94306
Phone 415-326-4448

-Cost: Manual $2.22
Score Keys $4.00
Observer Form (pkg. of 25) $4.25
Self Appraisal Form (pkg. of 25) $4.25
Profiles (pkg. of 25) $1.75

-Ratings by observers and self ratings in 14 areas: unobtrusiveness, friendliness, responsibility, considerateness, independence, rapport, enthusiasm, sociability, conformity, calmness, effective communication, insight, social control, anger control. Reliability, validity and normative data based on institutionalized male delinquents. Parallel forms for observer, self-appraisal.

-Comments: There are two forms of this instrument: an Observer Form, for ratings by teachers, probation or correctional officers, counselors, etc.; and a Self-Appraisal Form for self evaluations. Though based on extensive research with male delinquents, the time and factors are relevant to normal adolescents as well. Ideal for evaluating behavioral change in school and for comparisons between self and observer ratings for use in counseling or research. At present, the instrument is very rough but it definitely fills a gap at the secondary level.

PITTSBURGH ADJUSTMENT SURVEY SCALE

-Designed by Allan Ross of the Pittsburgh Child Guidance Center

-Not available commercially

-Comments: This instrument was critiqued by Swift & Spivack (1973) and used in their comparison studies. They referenced the manual and scale as

available through the Pittsburgh Child Guidance Center. However, when contacted the Center indicated that interested parties should contact:

Dr. Allan Ross
Psychology Department
Stoney Brook, Long Island,
New York 11730

Also, please refer to Ross et al. "The Development of a Behavior Checklist for Boys" Child Development Vol. 36, 1965.

PUPIL CLASSROOM BEHAVIOR SCALE

-Devised by Dr. Chan Dayton

-Grades 1-12

-Available from:

D. Mitchell Dayton
University of Maryland
Research and Demonstration Center
of the Interprofessional Comission
on Pupil Personnel Services
Division of Human and Community Resources
College of Education
College Park, Maryland
Phone 301-454-2026

-Comments: The manual and scales are not available commercially. The manual is available to interested individuals by contacting the above address. Interpretation of results are not available so, therefore, the scale is of little practical value other than research at present.

RUBIN BEHAVIOR CHECKLIST

-Devised by E. L. Rubin

-No longer commercially available

-Comments: This checklist was critiqued by Swift & Spivack (1973) and was used in their comparison studies. They referenced the manual and checklist as available through the Wayne State University Press, Detroit, Michigan 48233. However, this company has indicated the manual and checklist is no longer available in print.

RUTTER CHILD SCALES "B"

-Devised by M. A. Rutter

-Not available commercially

-Comments: This scale was critiqued by Swift & Spivack 1973 and was used in their comparison studies. They referenced the scales through Rutter, M.A., "A Children's Behavior Questionnaire for Completion by Teachers: Preliminary Findings." Journal of Child Psychology and Psychiatry 1967, Vol. 8 (1-11).

WALKER PROBLEM BEHAVIOR IDENTIFICATION CHECKLIST

-Devised by Hill Walker

-Grades 4-6

-Rated by teachers

-6 scores: acting out, withdrawal, distractibility, disturbed peer relations, immaturity, total.

-Available from:

Western Psychological Services
Publishers and Distributors
12031 Wilshire Boulevard
Los Angeles, California 90025

-Price: Checklist (100) $8.50
Manual $2.50

-Comments: Useful checklist to quickly identify elementary grade children with behavior problems. Takes only a minute or two to check which of the 50 statements on the checklist apply to the child being rated. Can be administered by anyone familiar with the child, and is especially valuable for teachers. Provides a total score, with a cutoff for classifying children as being disturbed.

THE USE OF OBJECTIVE OBSERVATIONAL DATA IN THE IDENTIFICATION OF EMOTIONALLY DISABLED PUPILS

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The Importance of Collecting Objective Observational Data

The observation of students in classroom environments is a well-established procedure for gathering precise information regarding student behavior. According to Frank Wood, "Observation systems are the spectacles to help see better how others are behaving" (Wood and Brazil, 1974). This analogy is particularly useful in reminding ourselves that even though we have acquired professional spectacles, they indeed are clouded by a number of factors. First of all, each professional views behavior from his/her own professional orientation. These biases affect not only what behavior the professional looks for, but also how the behavior is described and labeled. Second, the time available to the professional for looking at behavior and the consistency of attention may skew the accurateness of the perception. In addition, each professional interacts with the content of what is viewed in an emotional way--the value system of the viewer determines, in part, the subjective evaluation of the observed behavior. Lastly, pressures are often put upon the professional by others to interpret the observed behavior according to some preconceived conclusion or hidden agenda. These factors operate interactively and indeed influence or cloud the professional spectacles we wear. This results in subjective, opinion-laden information being used in the description, as well as the interpretation of a student's classroom behavior.

This subjectivity in teacher ratings and reports of behavior is particularly troublesome when dealing in the schools with children said or known to have "emotional disabilities". Such subjective descriptive information not only fails to recognize the situational differences of behavior, but also fails to clarify the teacher's upset with the child as an interacting variable. This misinterpretation of students' behavioral difficulties in live situations can lead to errors in identification and labeling of children, to inaccurate formulation of objectives and intervention plans, and to gross assumptions of improvement or regression which are largely unsubstantiated and subject to the spectacles through which the child was viewed.

A study on teacher bias in the observations of children by Ysseldyke and Foster revealed that expectations are indeed carried by labels, and that such expectations influence what is observed. In this study, a color videotape of a normal fourth grade boy was shown to groups of regular teachers. Following the showing, the teachers were asked to complete a behavior rating scale based on their observations. One group of teachers was told that the child was evaluated by a clinical team and considered normal. Two other groups of teachers were told that the child was considered to be emotionally disturbed or learning disabled. By comparing the ratings made by teachers, it was shown that teachers rated the behavior more negatively when they had been told the child was judged to be learning disabled or emotionally disturbed. No differences in ratings were found between the perceptions of behaviors rated learning disabled or emotionally disturbed (Ysseldyke and Foster, 1978).

When teachers' judgments of behavior are examined, it is found that they typically overestimate behaviors particularly troublesome or irritating to them. According to Walker, "the relationship between adults' informal estimates or judgments of behavior and the actual frequency of such behavior is notoriously low." It is nearly impossible for the classroom teacher to develop acurate estimates of children's daily classroom behavior while relying upon only his/her overt judgment (Walker, 1978). Often the teacher's difficulty in tolerating certain behaviors is really what's being described, not the precise nature or frequency of the behavioral problem (Walker, 1978).

Observational data appear to yield the most acurate and objective information possible regarding problems in the classroom and useful recommendations for change (Lynch, 1977). Systematic observation and recording procedures should assist the professionals concerned with the emotionally disabled child by: 1) identifying and analyzing specific problem behaviors, 2) monitoring child behavior across time, and 3) providing a means to evaluate intervention procedures specifically designed to change the problem behavior (Sitko et. al., 1977; Walker, 1978). To the teacher's benefit, systematic observation techniques may lead to the discovery of the functional relationships between school survival behavior and academic achievement (Hops and Cobb, 1972). Such important information should guide the instructional plan for both the deviant child and the general class of peers (Sitko et. al., 1977).

Review of Pertinent Literature

One of the first major researchers to use systematic observation procedures in studying children was Gerald Patterson at the University of Oregon. His coding system used 35 behavior categories and was used to record the interactions of family members in their home environments. These data were compiled in a variety of studies, including normative aspects of the behavior of "normal" versus "deviant" children, outcome effects of behavior modification interventions, generality of children's behavior across school and home settings, and the relationships of child behavior to parental attitudes. Patterson and his colleagues have also extensively explored the methodological problems inherent in observation systems and have explicit guidelines for establishing training regimens for observers, validity of codes and reliability of data (Johnson and Bolstad, 1973).

Structured classroom observations of teacher-child interactions were an important ingredient of the classroom management procedures advocated by their slogan, "Catch a child being good." They developed a classroom behavior change program consisting of four essential steps: pinpoint, count, record and check. Observation codes initially included eight categories of teacher behavior, seven categories of student behavior, plus special categories for individual chidren. The researchers used their findings primarily in studying the possibilities for teachers to apply their attention and praise contingently to reduce behavior problems in the classroom. Later codes became greatly simplified with the main categories rating teacher approval or disapproval of academic or social behaviors and student on or off task involving passive, noise, or motor behavior (Becker et. al., 1967).

Semmel and Thiagarajon at Indiana University have reviewed the uses of observation systems in special education. They discuss applications in the areas of research, evaluation, supervision, student intervention, teacher training and teacher self development. Their main interest has been in using observation systems in the preservice training of teachers. Consequently, they have explored the problems of observer training and have developed procedures for training a large cadre of observers simultaneously with touch dial recording circuits and videotaped class sessions. They have recommended that observers code with comprehensive category systems rather than single target behaviors in order to provide better information of the total picture (Semmel and Thiagarajon, 1973).

Robert Wahler's study of the covariance of behavior across home and school settings was one of the first research efforts to look at a child as deviant in more than one setting. An 18-category code was used to identify clusters of behavior, which were then tracked for stability across baseline, treatment and follow-up program stages in home and in school. Out of the larger code, six behavior categories were actually found to cluster together. These behaviors did not predictably change in relationship to each other within a home or school treatment phase. However, the observations did show that planned change in the child's behavior in one setting was accompanied by unplanned change in his/her behavior in the other setting. Although these findings were puzzling, the research established the validity of the code's ability empirically to record behavioral differences across home and school settings (Wahler, 1975).

Wood and Brazil at the Universities of Minnesota and Louisville developed the Pupil Observation Scale with 13 behavioral categories which were equally weighted with as broad a range of positive behaviors as of negative behaviors. Their concern with the traditional practice of using codes focusing primarily on deviant behaviors was based on findings that observations of a child labeled as a "problem" tend to create a "negative halo," e.g. evidence of the child's positive behavior is suppressed. Their code focused upon student behavior rather than teacher behavior in order to reduce teacher anxiety. The information gained from the observations was found to be useful in helping teachers and students plan more appropriate interventions. A series of studies was carried out with students in special classes to explore correlations between special class placement and deviant behaviors. A control group technique was used, and this led to the development of a way to use comparative behavioral data for establishing deviance. These studies have confirmed that "good" and "bad" can be found in all children, and that observation systems are the "spectacles" to help professionals see better how others are behaving (Wood and Brazil, 1974).

Objective observational data have long been used in the identification and selection of children admitted to the Experimental Education Unit (EEU), a special school operated by the University of Washington. When children from the surrounding districts are referred to the EEU, the child's teacher fills out the Social Behavior Rating Scale. This rating scale covers 13 verbal and 20 physical action behaviors and teachers simply rate with a three-point scale those problems felt to be a handicap to the child. Those verbal or physical behaviors checked on the rating scale form the target behaviors for gathering

objective observational data. The referring teacher also selects two peers for observation who represent the range of performance expected in that class--the "good" peer and the "poor," or minimally acceptable peer. Observational data are then gathered for the referred student and the two cohort students for five consecutive days during the daily 30-minute time period judged most problematic for the referred child. A frequency count is made for each of the targeted behaviors; the median rates per minute are graphed for each behavior. The cohort peer data are used to provide the measure of difference between the referred child and the cohorts. The re-entry behavioral objectives are established at the 75th percentile of the difference between the median scores of the two cohort peers selected to represent the acceptable behavioral range of the class, e.g. 75 percent of difference ("good" peer--"poor" peer). In setting objectives, consideration is also given to the teacher's specified desired rate for allowable behavior in the classroom.

Another major center using objective observation data is the University of Oregon. In one research study, Hops and Cobb developed a 19-category observation code for use in studying the relationships between school behavior and academic achievement. All the children in a selected regular first grade classroom were observed in a pre-arranged fashion. Each child was observed for two consecutive eight-second intervals before moving on to the next child. After the entire group had been sampled, observers returned to the first child and began the sequence again, continuing until the observation session ended. In this way, each child was sampled several times in each observation session, yet the observation data reflected the composite behavior of the entire class. Using these data to compare behavior for experimental and control classes, group intervention procedures were found to be effective in increasing school survival skill behaviors (i.e., attending, volunteering and decreasing looking around) which lead to a similar increase in academic achievement. The important development of Hops and Cobb was the procedure for sampling behavior of an entire class group and thereby establishing a method to discover behavior norms operating in specific classrooms (Hops and Cobb, 1972).

Perhaps the most promising use of observational data in relationship to programs for emotionally disabled chidren is that described by Walker and Hops at the University of Oregon. They were concerned with the difficulty in establishing a specific behavioral criterion level for judging when an intervention for a deviant child had achieved its goal. By gathering observation data on the child's own peers, the normal limits and expected standards of behavior could be defined. This procedure would also provide some control for the effects of situational variables which enter in when behavior is recorded in a special class setting other than the setting to which the behavior must generalize.

Target students who were referred for special class placements were observed in their own regular classes. At the same time, the peers of the target student were also observed. The code used was a modified version of the Cobb code (Walker and Hops, 1976). Using six-second time intervals, the behavior of the target student was recorded every other interval with that of the peers recoded sequentially every alternate interval period. Observations were made only in academic periods. Behavior continued to be recorded on a

daily basis for both special and regular classes during the baseline phase, the intervention in special class phase and follow-up after returning to regular class phase. Observation of peers was done on a weekly basis only during the special class intervention phase. The interventions compared for effectiveness included: 1) points and praise for displaying school survival behavior, 2) points and praise for making correct academic responses and 3) points and praise for both displaying school survival behavior and making correct academic responses. Behavior change under these three treatment conditions was measured by the observed behavior of the normal peers across phases. These peer data were found to be remarkably stable across 24 different classrooms throughout the six-month period. Walker and Hops found that the "behavior of the target students was changed at follow-up to within normal limits as defined by the behavior of their peers," and that these changes were maintained over the entire follow-up period (Walker and Hops, 1976).

All the studies reported above have used paper-and-pencil recording devices. Two of the resulting problems have been the difficulty of compiling such large masses of data and the time lag in getting the results analyzed. Advances have now been made in data collection instruments and computer programming which greatly increase the efficiency in gathering and analyzing observational data over previously used paper-and-pencil techniques. Electronic storage and recording devices are available which can be coupled with computer processing of data for immediate data analysis. Printing calculators are useful for easing the physical data recording task, and possibilities exist for marking code sheets which can be "read" by a computer.

A more versatile technological advancement is the recent marketing of portable observation devices. While more than one enterprise may now be developing or testing such data collection devices, the only well-tested and revised device is the solid state Datamyte 900, manufactured by the Electro/General Corporation of Minnetonka, Minnesota. The Datamyte has a simple keyboard similar to that of a desk size calculator. To record data, observers use an alphanumeric code to transmit the observed behavior into a language easily read by a computer. Various command keys are also included on the keyboard to give the computer instructions regarding the coded data such as beginning and ending of records, identification of behavior, etc. The Datamyte is plugged directly into a computer terminal and a hard copy of the data is printed out. The observer quickly edits the data for errors and then types in commands telling the computer how to analyze the data (Sykes, 1977). To use such a system, computer programs need to be developed by the observation project staff to have the data displayed graphically or analyzed statistically for the purposes of the project. The use of the Datamyte device and an interactive computer programming system makes it possible to analyze, display, and permanently record as much as two hours of observation data in 15-30 minutes--the time depending upon accuracy of initial coding and number of observation records entered.

It appears that the literature supports the contention that model procedures for conducting systematic observations of deviant and normal children have been developed and are available for guiding future applications at the grassroots level. Several observation codes are now available in the

literature for use with handicapped children. Guidelines for training observers and gaining adequate reliability are well established. The instrumentation and the computer technology to provide rapid data collection and analyses have been developed, at least at a prototypic level.

The use of normative peer data as a standard and procedure for evaluating intervention effects has proven its usefulness and its feasibilty. This technique's potential utility to provide valid and reliable data for decision makers in educational settings offers a new means for better identification, planning and evaluation of the behavioral change of emotionally disabled children.

Practical Considerations in the Implementation of an Observation System

There are many observation codes and procedures to select from when establishing an objective observation system. No one way is best for all situations; ultimately the code and observation procedure should be selected to answer the questions being asked through the observation data. Therefore, the following format was selected to present the various options and considerations important in implementing an observation system for students in the public schools.

WHO SHOULD WE CODE?

The single target child may be observed if only that child's behavior is of interest for the question being asked. This may be true 1) if the child is in a unique or special class situation where no comparison behavior is meaningful, or 2) if the child's behavior is of interest in its own sequential or part-whole relationship; for example, the length of compulsive behavior which follows a teacher command and precedes an on-task rating.

One or two cohorts may be observed simultaneously with the target child. In this case, peers may be selected from the class at large to represent behavior in that class. Cohorts may be selected to represent the range of acceptable behavior in the class by having the teacher identify a "good" peer and the minimally acceptable "poor" peer. In a special class situation the peer who has already successfully been mainstreamed may serve as the model peer. A target student may also be compared to cohorts remaining in the regular class in which the target would most likely be mainstreamed.

The entire peer group may be observed by sequentially coding peer behavior in alternate intervals with the target child. Only peers who participate in the same activity with the same behavioral expectations should be coded for comparison. For example, in a small group reading activity, only those peers in the reading group with the peer would be observed. In high movement situations, such as gym or recess, a rule may need to be established to alternate with the peer to the immediate right, target, peer to the immediate left, target, etc.

Examples I and II of the attached observation systems are set up in such a way that target, cohort, and/or peer groups could be coded. Example III, being a duration system, is only usable for the target student.

WHO IS THE OBSERVER?

If the observation system is planned to meet the goals suggested previously in this paper, rigorous standardization of training procedures and establishment of reliability must be carried out. Adequate and continuous training must be conducted through discussion of coding questions, practice coding with videotaped situations and practice coding with reliable, experienced coders.

If professionals serving in other capacities are the observers, such as psychologists, consultants, or teacher aides, one central person needs to be appointed to oversee the entire observation project. This person would need to be responsible for maintenance of the code definitions, training of new personnel, scheduling needed observations, and overseeing reliability checks. Professionals cannot be expected to gather valid or reliable behavioral data by simply independently studying a code manual--they must meet some level of reliable coding and continue to meet these standards over time.

Special observers may also be selected and trained to gather this data. In this case, the training and continued standardization of procedures discussed above need to be carried out and overseen by a special professional staff person, such as the ED consultant, ED supervisor, or psychologists specializing in ED. Credentials for classroom observing should include: 1) teaching experience at a variety of levels, 2) high scores on coding and manual dexterity tests, and 3) successful analysis of a videotaped classroom situation. Such observers may work on a part-time basis, being called to observe on a need basis.

A better degree of unobtrusiveness is gained by using observers not directly involved in a target child's service. If the observer is also an intervener, it is very likely he/she will gain stimulus control and the behavior of the child will change in the observer's presence. With similar concern, it is recommended that an observer know only the minimum of what is needed to

WHAT SHOULD WE CODE?

Specific behaviors may be targeted to answer the questions raised regarding the child. Teachers often are interested in tracking a few specific behaviors such as out-of-seat occurrences, frequency of temper tantrums, or social initiations. Example I can be used with as few as two target behaviors, "+" for any appropriate behaviors, and "-" for any inappropriate behavior. Example III shows a relatively simple code for studying the duration of a student's compulsive behavior as related to teacher direction and appropriate behaviors.

Comprehensive codes are available which represent all possible classes of behavior. As student behavior is observed, it must be coded into the category of the closest definitional fit. Established, systematic codes generally have 15-50 variables, all carefully defined in terms of examples and non-examples. The code should have pre-established guidelines for the recording of behaviors occurring at the same time. If double coding is not allowed, rules must be made as to which behavior takes precedence for coding. Example II uses an established comprehensive code. Example II offers a special feature of allowing six open variables (V1-V6) which can be used to track idiosyncratic behaviors which the observer may wish to more specifically define than allowed in the general code: for example, "self-abuse" as different from "self-stimulation".

WHO IS THE OBSERVER? (Continued)

gather data and is not privy to hypotheses and other's subjective interpretations.

In the ED field, where professionals burn out rapidly, one possibility is to provide a special classroom teacher with the option of working a year as an observer as a change to classroom teaching.

WHAT SHOULD WE DO WITH THE DATA?

Data needs to be summarized in a manner that is easy to understand. This generally implies that data should be graphed or tabled so that change and comparison is easy to see. To do this, various summary statistics of the data may need to be computed, such as percentage of total, mean frequency rate per minute, or mean length of duration. The statistic and means of display should be easy enough to understand so that the data is useful to non-specialists such as the parents, principals, and regular teachers. Communicative value is the priority in selecting a statistic of interpretation.

The data should also be retained in its full specificity for clinical uses. Only if the raw data and their time relationships are available can patterns of behavior and sequential relationships be studied. If the sequence of behavior is lost in the computing of overall percentages of behaviors, questions regarding antecedents and consequences cannot be explored. There is great danger in oversimplifying the data.

All the examples provided offer specific data as well as summary statistics. The paper-pencil record forms can be used to study the actual sequence of behavior, as can the initial computer list copy print-out of times for Example III. In addition, summary statistics used are frequency rate, percentage of total, mean, duration, and standard deviation of duration.

WHAT SHOULD WE CODE? (Continued)

Comprehensive codes are standardized and lend themselves to the gathering of behavioral data for comparisons across students, situations, and time. The use of hand-built, specific behavior codes are more restricted in their use to specific questions at a given time and situation. Simple, hand-built codes are often all that is possible for teachers to use without specialized training and are certainly adequate in many instances for analyzing responses to classroom interventions.

WHERE SHOULD WE OBSERVE?

A variety of situations must be observed in order to get a representative sample of behavior. If a total view of the behavior is desired, the following types of classroom situations should be viewed: academic/social, structured/unstructured, individual/group work. If observation time is limited, the observer should schedule the period of time most problematic for the child.

Once a set of situations are selected for observing, it is recommended that three to five days of observation data be gathered to establish an adequate baseline during these established situations. It has been found that rate and duration of behavior vary across situations and from day-to-day, although most major problems can be viewed on any given day if the situations are sampled correctly.

Time sample observation can be used following time tables such as those published by Tanner in Helping Others. Essentially, a random table of time intervals is selected and observation is carried out over several days at varying times. This technique may be more useful to teachers having a full day of direct contact,

SHOULD THE OBSERVATION BE LIVE OR ON VIDEOTAPE?

Whenever possible, observing should be done live in the classroom situation. The common problems associated with observing via a film or tape are that subtle information is missed, the eye gaze is limited to only what is on film, and it is difficult to hear and or discern sources of background noises. Videotape or film observation is only possible for single student or very small, stable groups.

Studies have found that live recording accurately catches 90 percent of information gained from repeated viewing of films. The increased information from repeated viewing is, therefore, probably not worth the tremendous time involved (Sackett, 1978)

WHERE SHOULD WE OBSERVE? (Continued)

with the child rather than outside observers who would need to come to the building more often for shorter observations.

It is important to remain as unobtrusive as possible when observing in the classroom. The teacher need only let the children know a visitor has come to watch the class and he/she must be careful not to single out any child. The observer's eye gaze should shift over the entire group, so that the target child is not singled out.

WHEN SHOULD WE OBSERVE?

When the behavior is coded depends on the question to be studied as well as on the available equipment. The main types of data recording are the following:

1. Frequency - the target behavior is marked each time it occurs, using paper and pencil markings, tokens, golf counters, or electronic equipment.

2. Duration - the beginning and ending times of a specific behavior are recorded, utilizing a stop watch or electronic equipment with a built-in timer. Example III uses a duration recording system.

3. Time Sampling - a time interval is selected and the most predominant behavior is recorded at the end of each set interval. Most systematic codes utilize a six or 10 second interval, and may use alternate intervals to observe, record, observe, record, etc. Generally, it is better to use as short an interval as possible because fewer behaviors can occur in the shorter time interval. When paper-pencil record sheets are being kept, off intervals will probably be needed to write down, or find and mark, the correct code number. When electronic equipment is used with a numerical key board, coding can

HOW OFTEN IS IT NECESSARY?

The guidelines previously discussed under the "Where?" column for establishing baseline should be met for all identification purposes involving comparison data. The recommended guideline is three to five days of data taken during the same situations.

There are situations when this is not possible and instead, a longer observation can be made over a large sample of situations. If this is the case, it is important to ask the teacher whether he/she feels the behavior was representative or not, and to repeat the observation in all cases when the behavior was not judged to be typical.

With less than five days of observation data there cannot be firm confidence that the statistics or data represent the true ranges or average levels of the behaivors. However, most significant target behaviors will be evident if an adequately long observation is made over situations known to be problematic.

Studies to date have found the behavior of the "normal" peers to be much more consistent from day to day. This is primarily true due to the averaging of behavior into a "composite peer" via the alternating peer recording system.

WHEN SHOULD WE OBSERVE? (Continued)

generally be done by touch, without the eyes leaving the situation and without the need to write during off-intervals. Examples I and II are both time-sampling observation systems.

4. Continuous Stream - as much behavior as can be seen and coded is recorded in a continuous stream. Electronic equipment is usually necessary to insure rapid coding potential.

HOW CAN WE RECORD THE DATA?

The common equipment for recording data include:

1. Golf-type wrist counters - can only be used for frequency counts on one behavior and one student at a time.

2. Stop watches - used for timing duration of behavior.

3. Remote control clock light - used as a stop watch, but can also record total cumulative time of occurrence of a specific behavior.

4. Paper-pencil forms - useful in all types of observing except duration. Advantage is the permanent record made of all behaviors in their time sequence of occurrence. Computer scan score sheets may also be used so that data may read and analyzed directly through a computer.

5. Printing Calculators - numeric code numbers pushed using the keyboard. Advantage is that eyes can remain on students and coding can occur more rapidly; also, less fatigue for observers.

6. Electronic Memory Data Collector, e.g., "Datamyte"- alphanumeric code entered using a keyboard; data stored in the internal memory system and analyzed

HOW OFTEN IS IT NECESSARY? (Continued)

Other than for identification purposes, observational data would be useful whenever significant changes are made in the child's intervention and for end-of-year progress assessment. Examples of intervention changes include different behavior modification procedures, changes in medication, and integration into mainstream classes.

HOW DO WE KNOW THE DATA IS RELIABLE?

Observation data must be sufficiently reliable if it is to be used in making important decisions regarding student programs. Reliability of 80 percent is generally considered adequate, and 85-90 percent is excellent.

Reliability is established on the observers doing the coding and recording. The reliability score is simply an agreement score telling the degree to which two raters would code behavior the same way at the same time. Many formulas are available for calculating this score, such as:

$$\frac{\text{\# agreements + \# nonagreements}}{\text{total \# observations}}$$

A truer reliability score is gained by making a correction for chance. One precise measure which corrects for chance is Kappa (Cohen, 1960).

Reliability should also be established over time. This would indicate the degree to which the observer would code the same behavior the same way on a different day.

Observers often simply code the same situation and derive a reliability score comparing their own data. However, a phenomenon known as "observer drift" can

HOW CAN WE RECORD THE DATA? (Continued)

via direct dumping into an interactive computer. Internal timer makes possible recording of duration as well as frequency data. Advantages are speed of recording, versatility of type of data, reduction of observer fatigue, and rapid data analysis. The Datamyte is available from: Electro General Corporation, 14960 Industrial Road, Minnetonka, Minnesota 55343.

HOW DO WE KNOW THE DATA IS RELIABLE? (Continued)

occur. This means that two observers may continue to code reliably together, but may drift away from the original, intended code definitions. For this reason, a "keeper of the code" person is needed to: 1) act as a master coder for checking reliability periodically of each observer, 2) code a set of master tapes or films which can be used in training observers or checking reliability, and 3) holding periodic discussions about problematic coding examples.

Summary

Most of the work with classroom observations systems has been done within the last five to seven years. Many established codes and procedures have been developed, tested and made available. Electronic and computer technology has also advanced to permit rapid data collection and computer analyses. The usefulness of objective observational data to the identification of behavior problems in the classroom has been demonstrated in several model programs operating around the nation. Little has been done, however, to explore the widescale applicability of these procedures. Attention must be paid to the issues of selection and training of observers, to cost-effective implementation of varying procedures, and to the public relations issue of securing acceptance by society of such highly developed "big brother is watching" observation schemes. In spite of the work remaining, the approach appears to be a major breakthrough in offering solutions to the problems of subjectivity which continue to plague us in the identification of children whose behavior is sometimes different from that of their peers.

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EXAMPLE I: WALKER CLASSROOM OBSERVATION SYSTEM

Original Code System

The simple code proposed by Walker (1978) used the following code variables:

Child Behavior:	+ Appropriate
	- Inappropriate
Teacher Consequences:	0 Praise
	/ Disapproval

With this procedure, one child is recorded at a given time, with coding occurring on a grid (shown below) at 10-second intervals.

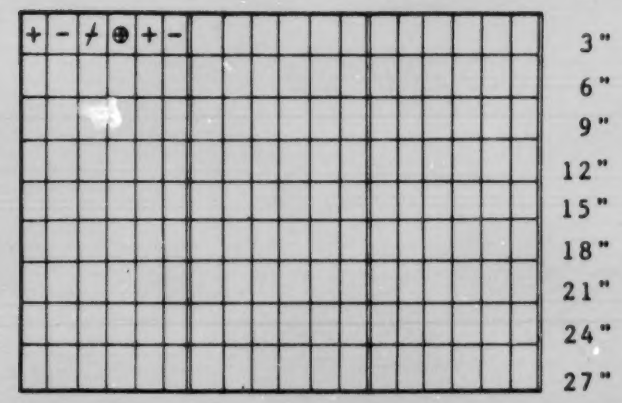
Figure 1

Pupil.....School.....
Teacher.....Date.....
Classroom Activity.....
Time Start:.....Time Stop:.....
Total Time:.....

Child Behavior	+ Appropriate
	- Inappropriate
Teacher Consequences	0 Praise
	/ Disapproval

Instructions: Code child's behavior as appropriate or inappropriate by recording a "+" or a "-" in each successive 10-second interval. Record teacher consequences in the same interval, if they occur, by using a circle (0) for praise and a slash (/) for disapproval.

Consecutive 10-Second Intervals



Modified Code System

The Walker system grid has been modified in the example "Target Tricia". The grid lay-out makes it possible to code the target child and one or more peers on the same form. The coder simply alternates observation intervals, e.g. target - peer - target - peer - etc.

A second modification shown is in the code itself. With this sytem it is possible to develop an individualized observation code or to adapt any other observation code which answers the questions being raised by the observation. In the "Target Tricia" example, a modification of the Madsen and Madsen code (1967) was used, along with the addition of an individualized interest variable (NC):

Child Behavior:	+ On-task
	N Noise off-task
	M Motor off-task
	P Passive off-task
	NC Name Calling
Teacher Consequences:	O Praise
	/ Disapproval

Data Display

Data from either code system can be compiled into a table as seen in the "Target Tricia" example and/or graphed.

Primary Developers

For more information regarding these procedures, see the following references which are listed in the bibliography:

Walker. Observing and recording behavior in the classroom. 1978.

Becker, et al. The contingent use of teacher attention and praise in reducing classroom behavioral problems. 1967.

WALKER BEHAVIOR OBSERVATION FORM*

Student_____ School_____

Teacher_____ Date_____

Classroom Activity_____

Time Start_____ Time Stop_____

Total Time_____ Interval Duration_____

Behavior Specification_____ Child Behavior + Appropriate
- Inappropriate

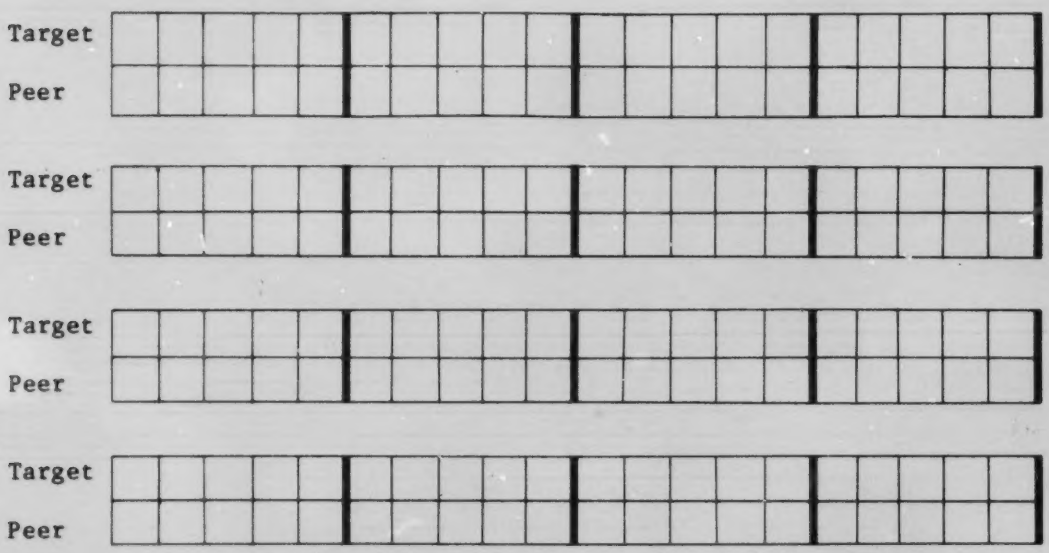
_____

_____ Teacher Consequence 0 Reinforcing
/ Disapproving

_____

_____

_____



* Based on Walker, Hill. Observing and Recording Child Behavior in the Classroom; Skills for Professionals. Iowa Department of Public Instruction: Iowa Perspective, October, 1978.

OBSERVATION DATA ON TARGET TRICIA

Target Tricia and whole class were observed one-by-one consecutively. Data was recorded as such:

5 second - observe target
5 second - record
5 second - observe one peer
5 second - record

each interval group = 20 seconds

1. In what percentage of intervals was Target Tricia's behavior judged to be on task?
2. How did this compare to the ratings of on-task behavior for the rest of the class?
3. What was the nature of Target Tricia's off-task behavior?
4. How does this compare to the nature of the off-task behavior of the class?
5. What were the antecedents of Target Tricia's name-calling?
6. Based on the data, what suggestions would you have for the teacher's reinforcement behavior?

WALKER BEHAVIOR OBSERVATION FORM*

Student Target Tricia School

Teacher Date

Classroom Activity Resource Room - Skill Class

Time Start 9:10 Time Stop 9:30

Total Time 20 minutes Interval Duration 5 seconds

Behavior Specification

+ on-task

N noise off-task

M motor off-task

P passive off-task

NC name-calling

Child Behavior + Appropriate
- Inappropriate

Teacher Consequence O Reinforcing
/ Disapproving

Target	+	+	P	P	P	N	N	N	N	N	NC	M	M	M	NC	N	M	+	⊕	+	+	+	M	NC	N
Peer	N	+	⊕	+	⊕	M	+	⊕	+	⊕	+	⊕	P	P	N	M	P	+	⊕	+	N	⊕	+	P	P
Target	P	P	M	M	+	+	+	N	N	N	N	N	+	⊕	+	+	M	M	P	P	P	P	N	+
Peer	⊕	+	⊕	M	+	NC	⊕	+	P	P	⊕	N	+	⊕	P	+	⊕	+	⊕	+	⊕	+	⊕	P	P
Target	+	N	+	+	+	+	+	NC	NC	N															
Peer	N	+	⊕	+	⊕	+	⊕	+	⊕	NC															
Target																									
Peer																									

* Based on Walker, Hill. Observing and Recording Child Behavior in the Classroom; Skills for Professionals. Iowa Department of Public Instruction: Iowa Perspective, October, 1978.

ANSWER SHEET - TARGET TRICIA

	Tricia		Peers	
+	20	33%	40	67%
N	15	25%	5	8%
M	10	17%	3	5%
P	10	17%	10	17%
NC	5	8%	2	3%
Totals	60	100%	60	100%

1. 33%

2. Peers were rated as being on-task, 67%, or twice as much.

3. Target Tricia displays all three types of off-task behavior, but is more frequently noisy than either having motor or passive off-task.

4. The off-task behavior of the peers is primarily passive and quiet, as opposed to being noisy or showing motor movements. Therefore, the typical off-task behavior of peers is not as disruptive as that of Tricia's.

5. The pattern which appears is that Target Tricia reacts to teacher reprimands or disapproval by calling her peers or teacher names.

6. (1) Increase use of positive reinforcement.

   (2) Try to reinforce Target Tricia more rapidly when she goes back on-task.

   (3) The teacher positively reinforced the peers 20 out of the 60 intervals. She reinforced Target Tricia only two (2) out of the 60 intervals, yet disapproved of her behavior four (4) out of the 60 intervals. Therefore:

      (a) Try to establish a pattern of giving Target Tricia positive reinforcement four (4) times to every one disapproval four (4) to one (1) ratio. Therefore, for the given situation with four disapprovals, the teacher might have provided 16 approving reinforcements.

      (b) If this high level of positive reinforcement is unrealistic, try to substitute ignoring techniques to reduce the need for disapproval.

(c) If ignoring techniques would not be sufficient, try to use a nonverbal signal or cue to Target Tricia instead of a reprimand calling attention to Target Tricia in front of the peers.

EXAMPLE II: SCHOOL SURVIVAL CODE

Code and Procedures

The code has eight appropriate behavior variables, 16 inappropriate behavior intervals, and six open variables for tracking behaviors of unusual interest. A complete description of the variables is included.

The system operates on a six-second interval basis, with only one behavior allowed for coding per interval. In cases that more than one behavior occurs, the "rules of precedence" must be followed.

Data can be compiled for the target child as well as for one or more peers utilizing one of the two attached recording sheets. The target child's behavior is marked with an "0" and the peer's behavior with a "/". The target child is to be observed every other interval, with a peer observed on alternaing intervals. A timed beeper is needed for signaling the end of each interval. This could be a tape recorder with a pre-recorded track and ear phone, or a beeper clipboard. One such clipboard with an adjustable timer can be ordered from:

Dick Schrawm
RCS Enterprises
2287 Olive Street
Eugene, Oregon 97405

The typical observation sequence utilizing an electronic recording device would be as follows:

6 sec.	6 sec.	6 sec.	6 sec.	6 sec.	6 sec.	
target	peer 1	target	peer 2	target	peer 3	etc.

When using a paper-pencil scoring sheet, the intervals may need to be lengthened to eight or 10 seconds to allow time for marking the sheet.

Data Display

The frequency and percentage of each behavior can be compiled on the data summary sheet. This information can then be graphed on the grid. If electronic recording equipment is used with computer analysis, the computer will be able to print out tables and frequency distribuitons.

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SCHOOL SURVIVAL CODE

Brief Summary of Student Behavior Categories

APPROPRIATE

Number	Title and Description
28 AT	Attend: On task, non-verbal behavior of attending to teacher-assigned or -approved classroom materials or activities.
77 PP	Positive Interaction with Peer: Verbal or non-verbal interaction that is teacher-assigned or -approved.
78 PT	Positive Interaction with Teacher: Individualized verbal or non-verbal interaction that is classroom-appropriate.
24 AG	Approval Gained: Verbal or non-verbal approval of student received from teacher or peer.
26 CO	Comply: Prompt acquiescence to a direction, command, threat, or rule.
22 CC	Contribute to Class: Verbal or non-verbal response to teacher stimuli in class group setting.
48 IT	Initiate to Teacher: Individualized interaction with teacher initiated or attempted.
46 IM	Incidental Motor: Minor motor activity that is not distracting and does not interfere with on-task behavior.
81 V1 82 V2 83 V3	Variables 1, 2, 3: Specific appropriate student behaviors selected for tallying because unusual or significant.

INAPPROPRIATE

38 FT	Fail to Attend: Off-task, non-verbal behavior of attending to materials or activities not teacher-assigned or -approved.
67 NP	Negative Interaction with Peer: Verbal or non-verbal interaction that is in violation of class rules.
68 NT	Negative Interaction with Teacher: Negative or non-academic interaction, verbal or non-verbal interaction.
34 DG	Disapproval Gained: Verbal or non-verbal disapproval of student by teacher or peer.
32 FC	Fail to Comply: Lack of prompt acquiescence to direction, command, threat or rule.
75 PL	Play: Fiddling with or handling an object that is non-approved and non-academic.

69 NY Noise: Excessively loud or inappropriate sound such as laughter, crying, or meaningless vocalization.

96 WM Words Without Meaning: Speech that is unintelligible or has no relationship to social context.

56 LO Look Around: Daydreaming or spacey behavior; pre-occupied stare or wandering gaze.

73 SF Self-Stimulation: Behaviors designed to stimulate self; range from bizarre and tissue damaging to minor but preoccupying.

66 MM Minor Motor: Minor repetitive motor behaviors that are not preoccupying but are distracting to others.

62 NA Negative Active; Excessive motor behavior that is of high enough rate or intensity to be intrusive and/or annoying.

45 IL Inappropriate Locale: Presence in a non-approved or inappropriate classroom area.

37 DS Destructive: Accidental or intentional behavior which has the potential for breakage or injury to objects or animals.

72 PA Physically Aggressive: Noxious physical interaction that could inflict pain whether or not the attack is severe enough to do so.

74 RG Restraint Gained: Student is physically prevented from engaging in unacceptable behavior or postured through desired behavior.

84 V4
85 V5
86 V6 Variables 4, 5, 6: As with positive variables, used when observer wishes to track selected behaviors of particular interest.

GENERAL CODING RULES

I. Rules of Precedence

As only one behavior code may be keyed in each interval, rules of precedence must be followed.

If more than one codable behavior is observed in an interval, the most 1) inappropriate, 2) recent, or 3) salient behavior is selected and coded.

1) INAPPROPRIATENESS.
Because the incidence of problem behaviors is of particular interest to clinical teachers, the decision is made to key the most aversive or intrusive behavior of those observed in an interval.

Examples - S is staring off into space (LO) and rocking chair vigorously back and forth (NA). Code NA.
- S makes audible engine sound (NY) and rolls eraser across desk (PL). Code NY.

2) RECENCY.
If a series of behaviors within an interval follows a logical chronological sequence, the last one observed before the beep sounds is recorded.

Examples - S is reciting as interval starts (CC) and then approaches T at his/her desk (IT). Code IT.
- S complies with request to sit down (CO) but complains loudly (NT). Code NT (also follows the rule of coding the more aversive behavior).

3) SALIENCE.
If two or more behaviors occur that defy the coding decisions outlined above and seem equally viable to code, back up to the most general decision level and determine if the behavior during the interval as a whole would be best described as Appropriate or Inappropriate. Then select the specific code in that category that most nearly describes the behavior.

Examples - S makes quiet, seemingly involuntary belching noise while attending closely to assignment. AT
- S makes clearly audible belch, keeping eyes on book but making no effort to repress sound. NY
- If S made several quiet belching noises, the coding for the same behavior would shift first from AT to NY.
- If the behavior occurred still again, the observer might consider it a unique and persistent problem and shift its coding to the first Inappropriate Variable open, i.e., V4, 5, or 6.

The point is that the rule to code the more aversive behavior not be interpreted as inviolable if it precludes giving a fair description of actual behavior. Acceptable or Unacceptable is the first decision to be made; an

identical repeated behavior may subsequently be coded differently throughout the course of one record if it assumes different significance within the context of the setting and of the subject's behavior in general.

II. Use of Codes for Variables

The variable codes (V1, 2, and 3 for appropriate behaviors and V4, 5, and 6 for inappropriate ones) allow the observer to tally behaviors that do not fit readily into an established code category. The observer is not limited in their use so long as complete and precise descriptions of the behavior so coded are written on the computer print-out.

Examples of use of V's one through six:

1. To track a particular behavior of clinical interest to teacher or another: for example hand-biting as distinct from other self-stimulation.

2. To capture features of a particular setting: for example appropriate sandbox play or inappropriate distractability from watching observer.

3. To describe the regular simultaneous occurrence of two codable behaviors: for example Words without Meaning and Attend for a subject who regularly engages in fantasy talk while working.

4. To enter the occurrence of a behavior about which the observer is unsure of the correct code: for example, swearing while playing volleyball may be temporarily assigned a V4. When the observation is over, the observer may be in a position to judge, either alone or by consultation, the category into which the behavior best fits. In this example, the swearing could be Negative Interaction with Teacher or with Peer, Words without Meaning, or, in a permissive environment, even Positive Interaction with Peers, etc.

The behaviors coded as variables must be thoroughly enough described that a data manager would have adequate information at a future time to subsume the V behavior tallies into existing code categories. This may be desirable in order to study behaviors across groups rather than individually as is clinically preferable.

APPROPRIATE

28 AT ATTEND

On-task, non-verbal, school related behavior. Student attends to material or activities assigned or approved by the teacher.

Examples - S watches a peer write spelling word on board
- S works puzzle with teacher permission
- S works math sheet

Non-Examples - S talks with T about assignment (PT)
- S gives report on elephants (CC)
- S looks at goldfish while peer recites (FT)

77 PP POSITIVE INTERACTION WITH PEER

Verbal or non-verbal interaction with peers that is not in violation of classroom rules. Student works with others on material or activities assigned or approved by the teacher.

Examples - S talks with peer about organizing a notebook
- S drills peer on flashcards
- S and peer talk quietly while painting mural

Non-Examples - S and peer talk quietly instead of painting mural (NP)

78 PT POSITIVE INTERACTION WITH TEACHER

Verbal or non-verbal interaction with teacher that is classroom-appropriate. Student has teacher's attention on an individualized basis in a context that is on-task or otherwise teacher-approved.

Examples - S receives help at his desk on worksheet
- S tells T story about home if encouraged by T to do so
- T calls S's name before asking question during class recitation. "John, please tell us. . ."

Non-Examples - S interrupts T's work with peer to tell story about home (NT)
- S approaches T's desk for help (IT); as interaction continues, (PT)
- T calls S's name after asking class general question. "Who knows. . ." John raises hand and is called on. (CC)

24 AG APPROVAL GAINED

Verbal or non-verbal approval of student given by teacher or peer. Approval may or may not be individualized to student and be contingent on specific behavior, but it must include student. May include approval of academic performance.

Examples - S receives pat on head as T passes
- S is told "Good for you" when gives right answer
- Class is told "You all did a nice job on your test."
- S receives M & M or poker chip for correct answer

Non-Examples - T in class: "Good work, all of you who are ready." (S is not. FT or NC)

26 CO COMPLY

Compliance with a verbal or non-verbal direction, command, threat, or rule made to the student individually or as one of a group. Code only in first interval compliance reasonably expected after each command.

To be coded CO, a behavior must be the same one clearly signaled or said by another, in this case usually the teacher. Compliance is to be coded to describe prompt acquiescence to a command, request, or rule, not

the behavior performed in compliance. CO does not include requests for academic feedback. CO is coded in preference to other appropriate behaviors observed in an interval. If the student is observed to have begun the desired behavior within 3 seconds of the termination of the command, code CO. If the student's interval is over too quickly to make that determination, and if at the start of his next interval he is judged to be in the act of compliance and that is the most salient behavior codable throughout the 6 seconds, CO may be coded for one interval. Therefore, "prompt acquiescence" may be defined as a behavior starting within three to nine seconds that was directly stimulated by another's command.

Examples - T: "Class, please take out your notebooks."
S opens desk and reaches for book within 3 seconds.
- T: "John, shut up!"
S finishes sentence and is quiet.
- T shakes head and puts finger to lips. S stops talking.

Non-Examples - T: "John, tell us what 4 x 4 is."
S: "16" (PT)
- T: "John, shut up!"
S does not within 3 seconds. (FC in 1st S interval; NP in next if S still talking.)

22 CC CONTRIBUTE TO CLASS

Verbal or non-verbal response to teacher stimuli in class group setting. Student raises hand or offers information related to on-going academic activity in answer to a teacher's general question or participates in a group response.

Examples - T: "Who discovered America - Everybody"
S and others: "Columbus"
- T: "Who wants to wash the board?"
S - raises hand
- S sings and claps to rhythm in music class

Non-Examples - S answers T's question during one to one work at desk (PT)
- T: "Who discovered America - Everybody"
S: "My dog"; Others: "Columbus." (NT)

48 IT INITIATE TO TEACHER

Interaction initiated or attempted by student to teacher, but not in conjunction with class contribution.

Examples - S raises hand for help with seat work
- S approaches T's desk with book in hand
- S takes T's hand when walking down hall

Non-Examples - S approaches T, sticks out tongue. (NT)

46 IM INCIDENTIAL MOTOR

Repetitive fine or gross motor behaviors such as shaking a pencil, wiggling legs, that are not preoccupying or intrusive on others and do not distract the student from his otherwise on-task, attending behavior. IM is coded when the first decision has been made to rate the behavior in the appropriate category, but the child is observed displaying hyperactive or restless behaviors of clinical interest. To distinguish LI from MM, note if P or T within peripheral view has obviously attended to the behavior.

Examples - S twists hair while reading lesson
- S jiggles foot while watching demonstration

Non-Examples - S continuously twists hair and does not attend to school work (SF or FT)
- S jiggles foot during demonstration to the point of attracting another child's attention (MM)

81 V1 Variables 1, 2, 3
82 V2
83 V3

Specific behaviors of Subject or Peer selected for tracking because unusual or significant in a given observation or not adequately described in a routine behavior code. Usually given precedence over other coding options possible during interval. The behavior must be fully described in an accompanying memo.

Examples - Teacher makes use of planned ignoring as management technique. Each aversive S behavior followed by T ignoring is coded V3.
- Teacher sits with children in sandbox at recess to encourage language, imaginative play. V2 coded for each interval S displays appropriate sandbox play.

INAPPROPRIATE

38 FT FAIL TO ATTEND

Off-task, non-verbal behavior. Student attends to materials or activities other than those assigned or approved by the teacher.

Examples - S draws picture instead of studying spelling words
- S watches peer do puzzle instead of doing worksheet
- S looks at pictures in back of books instead of reading assigned passage

Non-Examples - S looks aimlessly around room (LO)
- S picks at pencil point instead of writing (PL)
- S talks to peer instead of working (NP)

67 NP NEGATIVE INTERACTION WITH PEER

Verbal or non-verbal interaction with peers that is in violation of classroom rules. Student talks with another about non-academic subject without teacher approval.

Examples - S passes note to peer
- talks about recess during math corner time
- whispers friend's name loudly during language lesson
- S argues with peer over pencil

Non-Examples - S is called "Stupid" by peer for spoiling his paper (DG)
- S crumples peer's homework (DS)

68 NT NEGATIVE INTERACTION WITH TEACHER

Conversation with or non-verbal signal to teacher that is negative or non-academic or occurs when classroom rules do not allow interactions.

Examples - S interrupts to ask question when T is busy with another child
- S relates story about pet when called on to take turn reading
- S argues with T over being held in for recess
- S sticks out tongue at T

Non-Examples - S refuses to come when called by T (FC)
- S scolded by T for FC (DG)

34 DG DISAPPROVAL GAINED

Verbal or non-verbal disapproval of student's academic or social behaviors given by teacher or peer. Disapproval may or may not be individualized to student or contingent on specific behavior, but it must include student. If disapproval includes a clear request for alternative behavior, code CO or NC.

Examples - Class is told, "You guys are hopeless."
- S is told, "Wrong letter" by T
- S is told, "You're a creep," by peer
- S is slapped or shaken by T or peer
- T shakes head no at S when S observed whispering

Non-Examples - T holds S's arm as S takes swing at peer (RG)
- T shakes head no at S when S is whispering and puts finger to lips. S still talks. (FC)

32 FC FAIL TO COMPLY

Failure to comply with a verbal or non-verbal direction, command, threat or rule made to the student individually or as one of a group. Code only in first interval compliance is reasonably expected after each command.

As compliance is to be coded to describe prompt acquiescence to a command, request, or rule within three to nine seconds depending upon the interval termination, so failure to comply is the lack of such prompt acquiescence. If the requested behavior begins but only after repeated nagging or prompts or is delayed past the allowed three to nine seconds, FC is coded. As in CO, FC is coded in preference to other behaviors occurring jointly. To code FC, the observer must judge the command to have been heard and understood by the child.

Examples - T: "Put your crayons away." in loud, clear voice. Class continues to color
- T: "Get up, John." S stays on floor and says, "I don't feel like it."
- S begins prompt acquiescence but within interval stops compliance behavior

Non-Examples - S continues to stay on floor for another interval T ignores (IL)
- T gives a long, multiple direction which S begins but does not complete in interval (CO)

75 PL PLAY

Behaviors usually involving the subject's hands and active movement of an object in an activity that is non-academic and not approved by the teacher. Fiddling with materials in repetitive manner.

Examples - S builds log cabin with his crayons
- S repetitively ruffles pages of book with his thumb
- S runs toy car back and forth across desk during seat work time

Non-Examples - S rubs neck of t-shirt across lips repetitively (SF)
- S bangs desk lid up and down (NA)

69 NY NOISE

Excessively loud or inappropriate sound. May be a respiratory or other meaningless vocalization, laughter, shouting, yelling or crying. Vocalization may be appropriate but uttered so loudly as to be disruptive, or noise may be soft but noxious. To code NY, the noise level must be the most salient characteristic of the behavior.

Examples - S makes audible engine sound when running pretend car on desk
- S hics loudly enough to attract attention from peers
Non-Examples - S shouts at T: "You stink!" (NT)

96 WM WORDS WITHOUT MEANING

Speech that is unintelligible or has no relationship to social context. Includes words used in echolalic or idosyncratic way, fantasy talk, and speech that is unintelligible although clearly heard.

Examples - T: "How are you, Donnie?"
S: "How are you, Donnie?"
- S recites TV commercials to self while pacing hall.
- S uses fantasy talk while on-task in seat work.
Non-Examples - S makes car noises while watching movie (NY)
- S is seen to whisper to peer during reading group - unintelligible to O, but reasonable to assume it intelligible to context. (NP)

56 LO LOOK AROUND

Daydreaming, or spacey behavior; looking around with wandering gaze or pre-occupied stare.

Examples - S stares out window
- S looks absently around from one peer to another instead of at blackboard
Non-Examples - S watches peer attentively instead of watching T at board (FT)

73 SF SELF-STIMULATION

Behaviors which student uses repetitively to stimulate self such as swinging feet, masturbating, and flapping hands, done to the extent that attention to other on-going activities is precluded. May be bizarre and potentially tissue damaging or minor but completely absorbing.

Examples - S sits on floor rocking body back and forth
- S pulls hair over face to examine split ends precluding attention to teacher
- S repeatedly rubs eyes with shirt tail.
Non-Examples - S vigorously picks nose while reading steadily (MM)
- S briefly wipes hand across nose while reading steadily (AT)

66 MM MINOR MOTOR

Repetitive, often unconscious or involuntary, fine or gross motor behaviors such as tapping finger, wiggling legs, that may be distracting to others but are not the student's sole preoccupation.

If the first decision has been made to characterize the behavior as essentially Inappropriate, MM is coded. This should include behaviors generally considered inappropriate by teachers, such as nose or scab picking, even if they don't distract student from working or annoy others. To distinguish MM from IM, note if P or T within peripheral view has obviously attended to the behavior.

Example - S jiggles leg continuously while doing seat work - peers and/or T attend
Non-Examples - S twists hair while reading lesson (IM)
- S jiggles leg so much that chair moves across floor (NA)
- S jiggles leg continuously while doing seat work - neither peers nor T appear to notice

62 NA NEGATIVE ACTIVE

Physical activity which may be repetitive and is of high enough rate or intensity to be intrusive or annoying to the class. Excessive, frequently gross motor behavior, often not directed toward anyone in particular, but student appears fully aware of behavior and of its effect on others. Having tantrums.

Examples - S rocks desk chair back and forth on its hind legs
- S rolls on floor and screams
- S repeatedly pulls T's sleeve
- S faces backward in his seat
Non-Examples - S's bottom leaves sat as he crawls to retrieve pen (IL)

45 IL INAPPROPRIATE LOCALE

Presence in a classroom area not approved by teacher or inappropriate for academic activity that is occurring.

Examples - S goes to pencil sharpener (AT 1st interval) but stays much longer than necessary(IL subsequent intervals)

Non-Examples - S goes to bookcase when finished with seatwork and is not

37 DS DESTRUCTIVE

Behavior which has the potential for breaking a material item or harming an animal whether accidently or intentionally and whether actual damage is done or not.

Examples - S crumples up his school work
- S pokes gerbil with pencil
- S jams pencil point on desk
- S throws piece of chalk on floor
Non-Examples - S throws piece of chalk at peer (PA)

72 PA PHYSICALLY AGGRESSIVE

Behavior that has the potential of inflicting pain whether or not the attack is actually severe enough to do so. Includes jerking or wrenching objects away from another, removing dangerous objects without caution from another hand, and all levels of noxious physical interaction.

Examples - S sticks foot in aisle as though to trip peer
- S throws pen at peer
- S grabs scissors from peer
- S bites T.
Non-Examples - S shouts threat of aggression at T (NT)

74 RG RESTRAINT GAINED

The student receives physical restraint to suppress, curb, prevent or correct his/her current behavior. The physical posturing of a student through a requested behavior that has not been displayed. Includes intervals spent removed from group as a consequence of misbehavior, e.g. in time-out room, in hall or on sidelines.

Examples - S has toy car pried from fingers by T.
T turns S's face toward him/her to establish eye contact.
- S is in time-out room.

Non-Examples - S is scolded by T (DG) and then told to go to time-out. (CO or FC)
- S has ear abruptly grabbed and twisted. (DG)

84 V4 VARIABLES 4, 5, 6
85 V5
86 V6

As with positive variables, used when the observer wishes to track selected behaviors of particular importance or not adequately described in a routine behaivor code. Usually given precedence over other coding options possible during interval. The behavior must be fully described in an accompanying memo.

Examples - S has one particularly intrusive mannerism and an accurate rate per minute for the entire period is desired.
- Peer 14 is seen regularly to stimulate aggression from S. Each instance of 14-stimulated PA is coded V5.
- Teacher attempts to correct tantruming by hugging and soothing child. Such reinforced tantruming is coded V6.

Name _____ Date _____ Page _____

Class _____ Child Marking 0 Peer Marking 1

Interval	Appropriate											Appropriate																					
1	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LO	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
2	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LO	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
3	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
4	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
5	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
6	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
7	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
8	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
9	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
10	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
11	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
12	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
13	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
14	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
15	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
16	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
17	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
18	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
19	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
20	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
21	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
22	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
23	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
24	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
25	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
26	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
27	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
28	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
29	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
30	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
31	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
32	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
33	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6
34	AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	FT	NP	NT	DG	FC	PL	NY	WM	LD	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6

T(C) _____

T(P)

Name _____ Date _____ Page _____

Class _____ Child Marking 0 Peer Marking ___

Interval	Appropriate	Inappropriate
1	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
2	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
3	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
4	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
5	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
6	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
7	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
8	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
9	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
10	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
11	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
12	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
13	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
14	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
15	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
16	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
17	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
18	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
19	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
20	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
21	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
22	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
23	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
24	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
25	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
26	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
27	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
28	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
29	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
30	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
31	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
32	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
33	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
34	28 77 78 24 26 22 48 46 81 82 83	38 67 68 34 32 75 69 96 56 73 66 62 45 37 72 74 84 85
T(C)	— — — — — — — — — — —	— — — — — — — — — — — — — — — — — —
T(P)	— — — — — — — — — — —	— — — — — — — — — — — — — — — — — —

OBSERVATION DATA SUMMARY SHEET

Name _____ Date _____ Observer _____

Teacher _____ Class _____ # Peers _____

Relation to Child _____ Activity _____

_____ _____

Time In _____ Time Out _____ IF YOU USED VARIABLES DEFINE ON BACK.

APPROPRIATE

		AT	PP	PT	AG	CO	CC	IT	IM	V1	V2	V3	T
CHILD	f												
	%												
PEERS	f												
	%												

INAPPROPRIATE

		FT	NP	NT	DG	FC	PL	NY	WM	LO	SF	MM	NA	IL	DS	PA	RG	V4	V5	V6	T
CHILD	f																				
	%																				
PEERS	f																				
	%																				

Graph of Child and Composite Peer Behavior Data

Child = red
Peers = black

% of 6-sec. Intervals

100
90
80
70
60
50
40
30
20
10

AT PP PT AG CO CC IT IM V1 V2 V3 T FT NP NT DG FC PL NY WM LO SF MM NA IL DS PA RG V4 V5 V6 T

APPROPRIATE INAPPROPRIATE

EXAMPLE III: TIME: AN INDIVIDUALIZED BEHAVIORAL DURATION CODE

Code and Procedures

This is an example of a hand-built code developed for use with one student. The code variables were defined especially to gather data related to the child's compulsive behavior in a variety of situations.

The data was collected using an electronic recording device, the Datamyte, which allows for sequential duration recording of the behaviors. The Datamyte emptied the data directly into a computer for immediate analysis. The print-out sample shows the summary statistics regarding this data.

Primary Developer:

Gail Fitzgerald
500 Newton Road
Iowa City, Iowa

TIME: An Individualized Behavioral Duration Code

78 Teacher Stimulus: A command or question given by the teacher in expectation of a verbal or motor response. This does not include praise given for compliance.

81 Lag Time: The time following a TS when student is trying to give a verbal or motor response. There is no motor activity or compulsive behavior.

46 Sub Vocal: Movements with throat or mouth and often involving entire neck and head prior to verbalization.

66 Compulsive Behavior: The movements he/she makes prior to accomplishing a task or during intervals of free time. This includes the touching or tapping with fingers of close objects, picking at fingers, and bird-like ballet type movements.

28 On Task: The appropriate end response to a TS. The time he/she is on task includes the duration of the task done appropriately with no intervention compulsive behavior. This includes eating, chewing food appropriately, and performing grid patterns.

22 Verbalization: Student's quiet whispered response to T's.

84 Other: Behavior not of interest such as waiting for a teacher to give the next task.

NAME: D[redacted]

DATE: 3-22-[redacted]

TEACHER:

RELATE TO

CLASS:

ACTIVITIES: Speech

OBSERVER

COMMENTS

Baseline (3)

PEERS

FOR BEHAVIOR CODE Verbalization	22
NUMBER OF BEHAVIORS=	38
MEAN DURATION OF BEHAVIORS=	5.34211E-2
STANDARD DEV. OF BEHAVIORS=	2.57801E-2
VARIANCE OF BEHAIVORS=	6.64612E-4
SUM OF SQUARES=	2.52553E-2
SHORTEST DURATION=	.02
LONGEST DURATION=	.15
RANGE OF BEHAVIOR LENGTH=	.13
TOTAL TIME OF BEHAVIOR=	2.03
% OF TOTAL BEHAVIOR TIME=	10.5784
FOR BEHAVIOR CODE On-task	28
NUMBER OF BEHAVIORS=	29
MEAN DURATION OF BEHAVIORS=	6.24138E-2
STANDARD DEV. OF BEHAVIORS=	.035003
VARIANCE OF BEHAVIORS=	1.22521E-3
SUM OF SQUARES=	.035531
SHORTEST DURATION=	.02
LONGEST DURATION=	.14
RANGE OF BEHAVIOR LENGTH=	.12
TOTAL TIME OF BEHAVIOR=	1.81
% OF TOTAL BEHAVIOR TIME=	9.432
FOR BEHAVIOR CODE Sub-vocal	46
NUMBER OF BEHAVIORS=	11
MEAN DURATION OF BEHAVIORS=	.103636
STANDARD DEV. OF BEHAVIORS=	4.79152E-2
VARIANCE OF BEHAVIORS=	2.29587E-3
SUM OF SQUARES=	2.52545E-2
SHORTEST DURATION=	.02
LONGEST DURATION=	.17
RANGE OF BEHAVIOR LENGTH=	.15

FOR BEHAVIOR CODE Compulsive	66
NUMBER OF BEHAVIORS=	28
MEAN DURATION OF BEHAVIORS=	9.71429E-2
STANDARD DEV. OF BEHAVIORS=	8.18036E-2
VARIANCE OF BEHAVIORS=	6.69184E-3
SUM OF SQUARES=	.187371
SHORTEST DURATION=	.03
LONGEST DURATION=	.44
RANGE OF BEHAVIOR LENGTH=	.41
TOTAL TIME OF BEHAVIOR=	2.72
% OF TOTAL BEHAVIOR TIME=	14.174
FOR BEHAVIOR CODE Teacher Stimulus	78
NUMBER OF BEHAVIORS=	91
MEAN DURATION OF BEHAVIORS=	7.07692E-2
STANDARD DEV. OF BEHAVIORS=	7.13794E-2
VARIANCE OF BEHAVIORS=	5.09501E-3
SUM OF SQUARES=	.463646
SHORTEST DURATION=	.01
LONGEST DURATION=	.54
RANGE OF BEHAVIOR LENGTH=	.53
TOTAL TIME OF BEHAVIOR=	6.44
% OF TOTAL BEHAVIOR TIME=	33.5591
FOR BEHAVIOR CODE Lag Time	81
NUMBER OF BEHAVIORS=	41
MEAN DURATION OF BEHAVIORS=	.121951
STANDARD DEV. OF BEHAVIORS=	9.08287E-2
VARIANCE OF BEHAVIORS=	8.24985E-3
SUM OF SQUARES=	.338244
SHORTEST DURATION=	.02
LONGEST DURATION=	.35
RANGE OF BEHAVIOR LENGTH=	.33
TOTAL TIME OF BEHAVIOR=	5.
% OF TOTAL BEHAVIOR TIME=	26.0552
FOR BEHAVIOR CODE Other Behavior	84
NUMBER OF BEHAVIORS=	1
MEAN DURATION OF BEHAVIORS=	.05
STANDARD DEV. OF BEHAVIORS=	0
VARIANCE OF BEHAVIORS=	0
SUM OF SQUARES=	0
SHORTEST DURATION=	.05
LONGEST DURATION=	.05
RANGE OF BEHAVIOR LENGTH=	0
TOTAL TIME OF BEHAVIOR=	.05

THE USE OF THE CLINICAL INTERVIEW IN THE ASSESSMENT OF SELF-CONCEPT AND AFFECTIVE STATE

Mark S. Shepp

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This paper first took shape as a presentation which was given on April 17, 1979, at an Iowa Department of Public Instruction (DPI) Special Study Institute entitled, "Identification of Emotionally Disabled Pupils: Data and Decision Making." This body of information was only one of eight presentations in all, covering such diverse subjects as behavioral observations, behavioral check-lists, setting analyses health factors, academic functioning, home and family data, and social functioning. The object of the workshop was to gain expertise in all eight areas and, most importantly, synthesizing all the data gathered into a "picture" of the individual chid, which could be used to decide whether or not that child fits the definition of "emotional disability" as it is written in Iowa. The question of programming was not addressed as such at the workshop but it does without saying that data gathered in the assessment provides a baseline of the child's behavior, along with outlining possible causative relationships, and thus becomes an integral part of programming or treatment.

Any of the eight sections then should obviously not be considered the whole story and the possibilities for interrelationships and interdependencies are myriad. Assessing any one area is not in itself difficult for the experienced worker, but the integration of all the parts into a meaningful whole is quite a different story. This paper will attempt to point out interrelationships and interdependencies between the areas where appropriate, but will not address the final synthesizing of all the information into a comprehensive "picture" of a deviant chid.

All of the presenters at the DPI Special Study Institute received feedback from the audience, and this writer was no exception, receiving many helpful and constructive comments. The main concern of those present seemed to be the real need for practical and usable suggestions, instead of hitting theory so heavily. That point is well taken and, this author hopes this paper will reflect that change. However, this writer still feels a coherent and logical progression from theory to assessment to treatment is extremely important. What results otherwise is sometimes known as "technical eclecticism." Morally, technical eclecticism, or the using of a proven effective treatment whether or not it fits into one person's theoretical stance, is a must. Who would withhold an effective treatment out of spite? It is the opinion of this writer, however, that where possible it is best for the science of human behavior as a whole if what we do clinically follows from a coherent theory with a firm basis in empirical research. Not knowing why or with what justification you are doing something in treatment or assessment may not bother others but it certainly bothers this writer. In any case, this writer's personal theoretical orientation will be included in this text, along with empirical backup of techniques where possible.

In this paper, the instrument used to assess affective state and self-concept is the interview. It is apparent that the interview is not the sole instrument which could be used in this undertaking. Data concerning self-concept and affective state could be gathered from a wide range of techniques as simple as asking the questions, "How do you feel?" and "What do you think of yourself?", to as complex a technique as inferring them from the way an individual child or adolescent uses the determinants available in the Rorschach Ink Blots. The interview is a technique for gathering information

about an individual, whether talking with that individual or someone who knows him well, and is interesting, useful, and challenging.

The first question which needs to be answered regarding the interview is a basic one -- "What is it?" According to Bingham & Moore (1924) in their book, How to Interview, the interview is ". . . a conversation with a purpose." Obviously, the interview has not changed in that respect since 1924. An interview in the context this writer uses is still a "conversation with a purpose" and that purpose is used as a tool to find something out about the individual with or without their permission. By "with or without their permission," this writer means that during a clinical interview a person's behavior may reveal things about himself that the individual may not even be aware of. This information is gathered, of course, not for malicious purposes but in the interest of assistance to the individual. That purpose would seem to invalidate most claims of invasion of privacy. In any case, when interviewing an adolescent or a child, an explanation of your purpose and goals will not only set the individual being interviewed more at ease but will also afford the opportunity for the interviewer to ease his conscience by attempting to secure "informed consent." Naturally, since in most cases a minor is being dealt with, informed consent has already been gained from the parent or guardian.

Now that we have defined the interview and have touched on some of the ethical issues involved, it is time to turn to an appraisal of its psychometric properties. The first question which needs to be dealt with is "Does the information gained in an interview conform to the psychometric properties we like to see in instruments used to gather information about people?" Most importantly, is it valid, or does it measure what it says it does? What relationships do the interviewee's answers have to his/her actual behavior?

We know from experience that eyewitness reports are notoriously unreliable, especially after a period of time as in a car accident. Likewise, research points out the fact that when asked personal questions, people tend to give answers which they consider proper or socially desirable. In addition to this already bleak picture some people might not even be aware of their own behaviors and motives as mentioned before. A classical example of this is quoted in Clinical Methods in Psychology (Weiner, 1976, p. 8) about a mother being interviewed as to her child-rearing practices. Apparently, during the interview, the mother held her son on her lap and when he began to play with his genitals, the mother, without looking at the child, firmly took his hand away and held it securely for a time. Later, when the interviewer asked her if the boy ever masturbated or played with himself, she said, "No" . . . he was a "good boy." She apparently was completely unaware of the episode that had taken place only moments before. We can see from these items that the interview has some problems with validity as a psychometric instrument.

What about reliability? Classically, an interview could be said to yield reliable data if two or more independent clinicians interviewing the same person reach the same judgment about him/her. Matarazzo in Handbook of Clinical Psychology (Wolman, 1965) reviewed the literature on psychiatric diagnosis which was interview-based and found that the studies reported a wide range of

findings from very unreliable to quite reliable. For example, Schmidt & Fonda (1956) asked a pair of psychiatrists to place 426 patients in one of three major categories (organic, psychotic, character disorder) and they agreed on 85 percent of the cases. However, when placing the patients into 11 subcategories, agreement fell to 55 percent. It seems that greater reliability was found when broader diagnostic discriminations were attempted, and less reliability was seen when finer discriminations were attempted. This says a good deal about classic psychiatric diagnostic categories, but it also says a lot about the interview as an assessment technique. The interview is a blunt instrument and it should not be used in attempting to cut fine slices.

The interview has problems with both validity and reliability. It is quite fallible and subject to substantial bias and error. This does not mean, however, that the interview is without value and should be disregarded as a tool for assessment. The interview has a great value and many advantages. A few of these are:

1. The interview does give the clinician an opportunity to gather first-hand verbal and nonverbal data regarding a person's behavior and his/her interaction with his/her environment.

2. The interview allows the clinician to assess the individual's personal view of the situation compared to the view of significant others.

3. The interview allows the clinician to assess the effect of the individual's personal belief system on his/her behavior and interaction with the environment.

4. The interview is flexible enough to allow the clinician to use it with the same individual at different times and in different situations or contexts to allow cross-temporal and cross-contextual comparisons of behavior (keeping in mind no two times or settings are ever exactly the same). The subject can also be questioned regarding his/her behavior at different times and in different situations during one interview.

5. The interview allows the clinician to establish an interpersonal relationship with the client by being concerned, emphathetic, and natural.

The interview has good points and is a useful technique, but it is not to be used as a sole and sufficient diagnostic technique. No one technique is ever sufficient in and of itself. It seems obvious that the larger the sample of behavior gathered, the more valid and reliable the "picture" of the behavior will be. Many and varied techniques should be used to determine the frequency, intensity, and duration of an emotional/behavioral problem. Some techniques seem to lend themselves more to one of the above mentioned descriptors than another, but a large enough sample of behavior should generate enough data to give a good, valid, and reliable measure of all three. Depending upon the theoretical orientation of the various team members and the manpower available, the methods used for gathering verbal and behavioral data could include:

1. Standardized tests.
   a) intellectual
   b) perceptual-motor
   c) academic
2. Searches of cumulative folders to give an idea of developmental sequence.
3. Direct observation using two independent observers if possible.
4. Interview with the child in different times and places and about different times and places.
5. Interview with significant others.
   a) parent (siblings)
   b) teachers
   c) playground aide
6. Check-lists and rating scales.
7. Peer reports.
   a) class play
   b) sociogram
8. Projective techniques.
9. Objective personality instruments -MMPI.
10. Home and family studies.

If all this data or the majority of it points in one direction towards a behavioral deficit or surplus, you can be fairly sure you have a valid and reliable "picture" of an emotional/behavioral disability.

An important point to make here, so that a view of the big "picture" is not lost by so much concentration on assessment, is that the collection of this data is a useless exercise if it is used merely for diagnosis. Use of this data must go beyond diagnosis and lend itself to the planning of an intervention strategy, or at least provide a baseline against which behavior after treatment can be compared in order to evaluate the intervention's effectiveness. The entire sequence of the assessment, diagnosis, and remediation of an emotional disability (singular is used here out of convenience

-- rarely is there only one behavioral deficit or surplus) seems to fall into three parts:

1. Putting the problem in measurable terms, such as frequency, intensity, and duration and then actually measuring it. At this point decisions about the level of service should be made.

2. Using the data available to design an intervention plan and carry it out.

3. Comparing post-treatment data with pretreatment data to evaluate the effectiveness of treatment. At this point, going back to the operationalizing or treatment planning drawing boards should be considered if necessary.

As mentioned before when talking about the interview, this writer basically uses two types of interviews. The first type engages in direct conversation with the child or adolescent in question if possible. The second type engages in conversation with "significant others," such as parents, teachers, playground supervisors, etc. These two types of interviews are somewhat similar in advantages and disadvantages except that the "significant other" interview is one time removed from the actual situation and hence more unreliable than the already somewhat unreliable self-report.

Up to this point we have been concentrating upon the interview itself as a tool and its properties rather than how the tool can be used. As mentioned before when discussing the interview's advantages and disadvantages, the interview is flexible in that it allows the clinician to use it with the same individual at different times and in different situations or contexts to allow cross-temporal or cross-contextual comparisons of behavior. These comparisons could also be made through the eyes of others in the "significant other" interview but, in the interest of increased validity and reliability, it is thought to always be best, when possible, to interview the individual in question.

This writer sees the flexibility as perhaps the most important attribute of the interview. It is applicable to primary assessment of disability and to the assessment of treatment outcome. The latter use of the interview was pointed out to this writer by another of the conference participatns whose name was not jotted down or remembered. Wherever you are, thank you for the reminder of an important use for the interview.

Regarding the first use mentioned above, the fact that behavior is situation specific is now well accepted in most circles. Situation specific in this context means that behavior varies widely across time and setting. That variability is quite important in that it helps specify or operationalize the problem as to the specific time and setting in which it occurs. The information regarding time and setting of occurrence can be gathered from either the individual in question or the "significant other." The variables which account for the time and setting variability are best gathered through interviewing the individual in question as to his/her perception of the differences between the situation and time. It should be noted that the psychiatric profession has recently begun making use of the interview across time. Using

a method similar to time sampling used in behavioral observation, psychiatrists find they can gather more valid and reliable data for use in making diagnostic judgments regarding recently admitted psychiatric inpatients.

The assessment of treatment outcome, or the monitoring of treatment via the interview, also involves comparisons of behavior over time. Comparisons of previously selected target behaviors shown in the interview (and hopefully in other more significant situations) can be made with those same target behaviors as treatment progresses or post-treatment. Caution must be used, however, so not to assume that changes noted in the interview have generalized to natural situations. Observe and interview in natural situations where possible.

As we move into the part of the paper dealing with self-concept and affective state, it will become apparent that a simple description or operationalization of these constructs is not enough. It is also very important to ascertain what the antecedents and consequences (cognitive and environmental) of these specific behaviors are.

In order for the construct "self-concept" to become useful in the context of this paper, it must first be made measurable, and workable. Interviewing techniques will be discussed which are useful in gathering data relating to the definition of self-concept. Self-concept is perhaps the most over-used and abused concept in psychology, but there is still a grain of truth and importance at the core of all that verbiage. The interchangeable terms are many; social self, self-esteem, self-regard, self-image, to name only a few. The construct of self-concept has been derided in radical behavioral circles as a useless "figment of cognition." This writer, however, is soft on cognition and, in fact, professes to be a cognitive/behaviorist. This means the writer recognizes the importance of cognition but also realizes that the principles of learning apply to thought as well as to overt behavior. This writer feels that self-concept can function usefully in self-statements or internal sentences one says to oneself.

The literature on self-concept is quite extensive. Coller (1971) thinks of self-concept as more a field of study than a unified construct. Self-concept may be a field of study as defined by Coller but, when used as evaluative self-statements made about yourself to yourself, it shifts back to a measurable construct. If thought of as internal self-evaluative sentences, self-concept fits into the "belief system" mentioned in Albert Ellis' Rational-Emotive Theory of Psychopathology. Ellis feels that adaptive and maladaptive emotions are both caused not by the things that happen to us in the environment, but by the view we take of these things. In other words, what we tell ourselves about what happen to us, or the things we tell ourselves about ourselves (self-evaluation), generate both adaptive and maladaptive emotions depending upon the internal sentences' rationality or irrationality. Our self-evaluations, if negative and irrational, can bring on maladaptive emotional statements.

Creelman, in 1954, defines self-concept as described by Ranes' (1976, p. 5) volume on self-concept as ". . . a multidimensional construct that covers and includes the total range of one's perceptions and evaluations of oneself."

This definition ties down self-concept more tightly than Coller's and is quite similar to this writer's feelings on the subject. It also helps the functional definition of self-concept to fit in with Ellis' model of emotional upsetedness. It should be noted here that when this writer speaks of self-evaluations nonverbal (physical/motor) as well as verbal statements are included.

The functional definition of self-concept is also quite similar to what Albert Bandura (1969) calls "patterns" or "standards of self-reinforcement." It seems that the modeled pattern or standard from which one decides whether or not to reward one's own performance is directly related to, and perhaps generates, the verbal/nonberbal self-evaluative statements one makes about oneself.

Self-concept then, when functioning as the self-evaluative statements one makes about oneself, fits in with Ellis' and Bandura's theories of maladaptive emotion and behavior, and thus becomes quite important to the professional involved in identifying and helping emotionally or behaviorally disabled children.

It follows that an individual who engages in much critical or negative self-evaluative behavior could be said to have a negative self-concept. To define negative self-concept, this writer used the criterion of more than 50 percent of behavior being critical or negative. The rationale for this is that even if our behavior were governed completely by chance, in most cases we would perform either successfully or unsuccessfully. Thus we would have a chance of being successful at least half of the time. It is felt that an individual who evaluates his/her performance negatively more than half the time is not even giving himself/herself the credit for being able to obtain a "monkey score."

Individuals who make negative self-statements or negative predictions about the outcome of their performance tend to over-generalize from one specifc behavior, which the individual may not be very good at, to clusters of related or nonrelated behaviors. There is usually no basis in reality for his/her prediction or evaluation of negative outcome with these other behaviors.

Since self-concept functions as verbal and nonverbal self-evaluative statements, the key is eliciting such statements and recording whether they are positive or negative. It should also be kept in mind that the interview is not the only way to gather self-concept data. It is extremely important to gather data from many different situations and times. This can be done in the interview but it should also be done through direct observation. When looking at these cross-temporal and cross-contextual comparisons, one should be alert for illogical over-generalizations or "contaminations." As mentioned before, the interview can be used with both the individual in question and with the "significant other."

Three phases make up the interview. First, the purpose of the interview must be explained and rapport must be established. It is always best for the interviewer to be as honest as possible with the interviewee, explaining that

the interviewer is there to talk about whatever problems are being experienced, and to find out whether or not the interviewee thinks a problem exists. The second phase is the assessment phase. Self-concept is not all that can be assessed but since self-concept is our subject, we will deal with only that. The interviewee is guided conversationally through the various components of his/her environment. In order to do this, "active listening" skills are important in eliciting conversation and/or self-evaluative statements. (For a good discussion of active listening, see Gordon, 1969.) Included in this paper under Figure I, the reader will find an interview form that might be helpful. Essentially, two verbalizations are needed by the interviewer, these are: "Tell me a little bit about . . ." to initiate the conversation, and "It sounds like you . . ." to reflect the individual's message and elicit more conversation. Space is left on the Figure I form to record the important verbalizations and nonverbal messages and the frequency of positive and negative self-evaluative statements (+'s and -'s). After going over the areas listed and following clues where they lead, the interviewer should debrief the interviewee by mentioning impressions received and asking for questions.

As mentioned above, the nonverbal "messages" should also be recorded. These messages are available in the individual's posture and motor activity while talking about various subjects. We are on shaky ground here because of the inferences which must be made, but this is still valuable corroborating data. Posture or motor signs may include the following:

1. Slumping
2. Shrugging
3. Averted eye contact
4. Negative head shaking
5. Voice tremors
6. Nervous hands and feet
7. Unusual gestures
8. Timing of bathroom trips

Most of the above mentioned signs would usually be associated in time with conversations regarding an area of negative self-concept.

If a difficult time is had eliciting self-concept data from an individual, it is possible to use the child's imagination to make his/her feelings more available to him/her. That is, if an individual is unable to give a clear picture of how he/she evaluates his/her own performance, you might take him/her on a "guided fantasy." This is done by asking the child to imagine that he/she is doing various activities from life performance areas (school, home, etc.), and ask him/her how he/she thinks or predicts he/she will do. This gives some idea of how the individual predicts the outcome of and evaluates his/her performance.

Figure I

Self-Concept

Basic interview -- verbalizations:

1. "Tell me a little bit about . . ."
2. "It sounds like . . ."

Components of the Environment.

Verbalizations and Nonverbal Messages	Frequency + and - Statements
I. School:	
II. Home:	
III. Interpersonal Relationships:	
IV. Sports:	
V. Other:	

We now turn to the more difficult of the two areas of assessment this paper deals with -- emotion or affective state. Emotion has been considered the baliwick of mental health professionals for decades, but it is quite difficult to operationalize and "work with." It is unlike self-concept in that it is very difficult to objectively judge its content and measure it. It is almost by definition locked inside the individual, and no one person can be sure he/she is experiencing exactly the same affect or feeling which another person is.

At this point in time, it would be appropriate to go into a short retrospective synopsis of the theory generated and research done in the area of emotion. Before the turn of the century, James (1890) in his book, The Principles of Psychology, identified emotion with the activity of the autonomic nervous system. This is called "peripheralist theory" and identifies emotion with bodily changes and visceral feelings. A 1927 article (Cannon, 1927) attacked the James theory, and suggested instead that autonomic activity is not a sufficient causative factor for subjective feeling states. Cannon's "centralist theory" holds that the autonomic activity associated with fear and anger are indistinguishable. In other words, very similar physical reactions can produce very different feeling states. Schacter & Singer in 1962 set out to investigate whether or not emotion is a one-directional interaction between cognitive and physiological factors. Schacter & Singer wanted to find out if physiological arousal is necessary for emotion to be perceived, and if cognitive labeling of that arousal is the source of emotional content. Their research involved injecting informed and uninformed subjects with a placebo and adrenalin. From their results, they concluded that emotions result from cognitive explanations of perceived physiological arousal.

Much criticism has been generated by the Schacter & Singer study as to methods and conclusions, and attempts to replicate it have not been successful and have, in fact, failed to support the hypothesis of one set of interactions between cognitive and physiological variables as regards emotion. Another field of study, postulated and summarized by Gellhorn (1970) suggests that perhaps the James formulation is in part correct. Meaning, that physiological arousal directly affects the hypothalamus to produce emotionality without being evaluated by the cerebral cortex.

In any case, it is clear that the jury on the exact nature of emotion is still out. Despite stunning progress made in the areas of biochemistry, biofeedback, and psychophysiology, affect remains a mystery. What is fairly clear is that no simple explanation will be found with two basic factors being involved. It is apparent that many factors are involved, and the interactions will be difficult to tear apart.

Much credit for the above discussion of the nature of emotion goes to a chapter by Robert Woolfolk in Lazarus' Multimodel Behavior Therapy (Woolfolk, 1976). By reading Woolfolk's chapter in its entirety and in perusing the data presented here, it can be seen that we are not on solid ground in attempting to assess emotion, simply because we do not know exactly what it is or how to effectively operationalize it. We have the technology to directly monitor physiological factors which relate to the intensity of emotion with biofeedback equipment. However, this is impractical in the everyday practice of the itinerant psychologist and is of no use in distinguishing emotions one from another.

Emotions do need to be dealt with, however, in clinical practice and in the identification of emotionally disabled children, since emotion is the major cause of distress to the behaviorally disabled individual and those around him/her. In the opinion of this writer, emotion can be quasi-operationalized as the subjective feeling state of the individual inferred from observation and/or self-report, and supported by motor correlates. To touch once again on something already mentioned, this writer believes that cognitions (self-evaluative statements/self-concept) have a great deal to do with whether we experience adaptive affect (satisfaction, disappointment) or maladaptive affect (despair, extreme anger).

In using the interview to assess affective state, we use the same three parts of the interview mentioned before. No rule keeps affective state from being assessed at the same time self-concept is being looked at, so essentially the first and the last parts (explanation and debriefing) could be the same. The assessment of affective state will perhaps be somewhat more "free form" than the assessment of self-concept which is in part related to the difficulty in tying down the subject at hand. The interviewer must use leading questions and be a good active listener in order to elicit a good number of emotion-related verbalizations from the subject. The interviewer must rely upon the individual's subjective evaluation of what he/she feels, while paying close attention to the manner in which the person behaves physically while speaking. The question which must also be asked is whether or not the physical behavior matches what the person is saying verbally.

The lead-off question which should be asked in the course of the interview is, "Which of these problems you're having is the most important as far as you are concerned?" This situation should easily elicit the strongest and the most readily available affect to the individual. Be careful to explore and record the environmental and cognitive antecedents and consequences of the affect for the purposes of intervention. After you have an idea of the major content of affect in the problem area, begin steering the conversation to similar situations in other settings and with other people. This is to ascertain if the affect is situation specific, or if it is a generalized state. It is good to keep a close watch as to whether or not the individual's nonverbal activity matches his verbalizations. The form labeled Figure 2 will be helpful in recording the interview techniques described here. This form will be useful in making cross-temporal and cross-contextual comparisons to check for similarities and discrepancies in intensity or emotional content. Space is also provided for recording cognitive and environmental antecedents and consequences of the situation.

In order to get some idea of the intensity of emotion (without biofeedback equipment), this writer uses the SUDS scale which is used by assertion trainers. Credit for this idea goes to a school psychology colleague at Northern Trails Area Education Agency NTAEA, Chuck Flagg. This subjective rating scale can be used not only for discomfort or anxiety, but also for anger, depression, need for revenge, etc. Those interested in a more thorough discussion should refer to Cottler & Guerra (1976). Using anger as an example for use of this subjective scale, an individual is asked to first imagine himself/herself as angry as could be and to set that as a 100 rating. Then

Figure 2

Affective State

Major Problem Situations:

Verbalizations	Nonverbal Correlates	Intensity (SUDS)
Antecedents	Consequences	

Verbalizations	Nonverbal Correlates	Intensity (SUDS)
Antecedents	Consequences	

Verbalizations	Nonverbal Correlates	Intensity (SUDS)
Antecedents	Consequences	

the individual is asked to imagine him/herself as calm as could be and to set that as a 0 rating. He/she would then be asked to estimate where he/she would fall on this scale between 0 and 100 when he/she gets involved in a particular situation. This technique can also be used in making cross-temporal and cross-situational comparisons of intensity of emotion.

If a child or adolescent has trouble verbalizing what he/she feels as many do, imagery or guided fantasy can again be used. The individual is asked to imagine the problem situation as if it were actually happening, and to physically describe what he/she is feeling. He/she is then asked to attach an emotive label to those physical feelings. If the affect is still unclear, the individual could be asked what he/she feels like doing. In some cases with adolescents and older elementary kids, it is advisable to give the youngster "homework" or ask him/her to observe his/her own emotional behavior and keep a record of it over a period of time. It is also possible to use the guided fantasy techniques to get cross-temporal and cross-contextual data to make comparisons.

Last but not least, in dealing with emotion, this writer will discuss the form maladaptive emotion or psychopathology takes in childhood, thus giving the interviewer a general set regarding what to be alert for. Certainly, a wide range of emotionality is seen in childhood, with latency age children's emotions being somewhat more primitive and adolescents' emotions being somewhat more sophisticated or perhaps just more confused. Hard research into childhood behavior disorders points out a dichotomy or a two-point solution, as seen by Peterson (1961) & Achenbach (1966) of: (1) acting out -- conduct problem, disobedient, fighting, attention-seeking; (2) withdrawn -- personality problems, shyness, anxiety, depression. This writer has found this dichotomy to be valid and finds the emotional component of most childhood behavior disorders to fit into one or the other, that is, some approximation of hostility/approach or anxiety/withdrawal, or a combination of these two.

The writer hopes that the balance between theory and practical application will be to the readers' satisfaction. The interview is a tool which can be used along with many other kinds of data for decision making as to whether or not a behavior disorder is of sufficient frequency, intensity, and duration to impede a child's academic functioning, interpersonal relationships, or general personal adjustment; thereby diagnosing him/her as emotionally disabled and eligible for special education or support services in the public schools of the State of Iowa. The interview can also be used to ascertain whether or not the individual's behavior is situationally and/or age appropriate. The child's self-concept and affective state are only one part of the whole picturee of a behavior disorder and are by no means the whole story. The data gathered by an interview to assess self-concept and affective state is useful only when it is integrated into a "meaningful whole," along with the other areas mentioned in the introduction (health, academic, behavioral observation, home, family, etc.) and when that "meaningful whole" is used to plan an effective intervention plan. Our final aim, after all, is not to merely identify, but to remediate also.

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BIOBEHAVIORISM: A REVIEW OF BIOLOGICAL FACTORS WHICH AFFECT CHILDREN'S BEHAVIOR

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In special education today we are operating under a philosophy and legal mandate that requires us to provide the least restrictive program for emotionally disabled (ED) and other handicapped youngsters. Educators are being required - and I think this is especially important in the case of ED youngsters - to document that attempts have been made to help these students adapt in the regular classroom environment. Many times classroom teachers have knowledge of special techniques which help a youngster modify his behavior so that learning can proceed for the youngster and his/her class. Sometimes a social worker, psychologist, or consultant can be of service to the classroom teacher in facilitating these changes. Ideally, then, we should make and document every reasonable attempt to help ED students learn under normal circumstances before we consider placing them in a special education program. If a youngster's behavior can be modified to an acceptable level, then no ED program is necessary, and there is no need to label the youngster ED. These requirements serve to safeguard the rights of students and protect them from unnecessary and capricious labeling and segregation from their peers. They also serve to avoid the unnecessary expenditure of tax funds. It is possible, however, that these procedures may be serving to filter students out of the educational system who are suffering from biological problems which interfere with the learning process.

To elaborate, now there is evidence that many children are able to survive the adverse conditions of poverty, psychotic parents, and/or abuse with their psychological health intact (Pines 1979). No one knows for sure why these invulnerable children adapt so well while others in the same circumstances develop behavioral and emotional problems; but the most likely answer will be found in the internal or biological environment of these children at the genetic or molecular level. However, in assessments of ED children we most often ignore physiological motivating factors. To borrow from Maslow's theory of the hierarchy of needs, the physiological needs are most basic and can be conceptualized as the bottom tier of a pyramid (Maslow 1954). Thus, physiological needs are the foundation upon which the higher order emotional and cognitive needs are built. If the physiological needs are not met, the chances of meeting the higher needs are greatly diminished. One could argue that the specific life events or learning environments for the vulnerable children are different from those of the invulnerable children, but this is an unlikely explanation in view of the research dealing with genetics and mental illness (Heston 1973; Science News, March 12, 1977; Science News, January 6, 1979; and Science News, January 13, 1979). Environment is very obviously important in shaping the behaviors and personalities of all children, but it is a major contention of this paper that there is a qualitative difference in the interaction of environmental and biological factors between so called "normal" and some ED children.

The two points I would like to emphasize, then, are one, that in trying to understand and modify the behavior of ED children we tend to ignore the physiological processes that influence behavior, and two, that our process of identifying ED children assures that in most cases we are finding children who do not respond to the external environment in a normal way and who function with biochemical problems that interfere with learning.

Only a few of the many possible biochemical problems of ED children will be dealt with in this paper. The focus will be upon some of those problems

which are relatively subtle and, therefore, often overlooked. Some recommendations for screening youngsters for these problems will appear later in this paper.

A frequently mentioned but rarely understood contributor to behavior problems for ED children is genetic inheritance. What is usually difficult to understand is that behaviors are not directly inherited, but the ability to produce proteins from genetic templates is inherited (Villee and Dethier 1971). The relationship between the production of these proteins within cells and the behavior we observe is not completely understood, but there is ample research to establish that there is a link. Drawing from research with laboratory animals it has been demonstrated many times that behavior and learning characteristics can be genetically influenced (Munn 1950). For instance, rats can be inbred to produce strains of "bright" or "dull" maze learners, even though the "brightness" or "dullness" does not necessarily hold up in other learning tasks. Another example is the relative aggressiveness or docility of various strains of laboratory animals (Barnett 1963). One human example that is well understood is the mental retardation that results from phenylketonuria (Villee and Dethier 1971). In this disease there is a genetic defect which results in the inability to produce the enzyme necessary to convert phenylalanine to tyrosine. The breakdown of phenylalanine gets stuck at a chemical stage which poisons the nervous system.

Various learning abilities and disabilities and some behavior disorders such as schizophrenia, depression, and alcoholism are being found to be genetically influenced. A theory which attempts to explain schizophrenia as being the result of two genes has been proposed by Karlsson and others (Hoffer 1973). These two genes are believed to produce proteins which become part of enzymes that control this metabolism of certain nutrients. Interference with the metabolism of these nutrients has been shown to create biochemicals which can cause disorders in thoughts, perceptions, and emotions. This theory also attempts to account for the incidences in the population of alcoholism and drug addiction (15 percent), creative schizoid personalities (5 percent), schizophrenia (1 percent), and childhood autism (.1 percent).

Kirk has proposed a theory which illustrates the interaction of physiological disorders and environmental factors in the development of schizophrenia in children (Kirk 1973). This theory can also be used to explain the development of learning disabilities which appear to have a genetic base. A graphic illustration of this theory (see appendix, redrawn after Kirk) shows how a child who is born with metabolism problems can enter into a cycle of increasing behavioral deviance. The cycle begins with a genetic deficit, brain trauma, and/or adverse prenatal conditions which results in a biochemical imbalance. Either the brain condition or the biochemical problem is responsible for a perceptual problem in the child which may go unrecognized. Because the child perceives the world in a peculiar fashion his/her behavior is likely to be labeled as lazy or stupid or unreliable. Thus, the child does not learn what is expected of him/her, is usually punished for failing and begins to feel inadequate. The child then begins to withdraw or act out and becomes discouraged and upset. These behaviors then feed back into the cycle at various places, increasing the biochemical imbalances due to the physiological by-products of stress, and increasing the perceptual problems and deviant behaviors. To further complicate matters, the

significant adults in the child's life (parents and teachers) fail in their efforts to train and teach the child. These adults then feel like failures and desperately try more methods to help the child. The result is that they become inconsistent in coping with the child and become frustrated with and alienated from the child. These developments, of course, just increase the child's distress.

Another biochemical problem which is very often overlooked in ED students is malnutrition. Studies have shown the devastating effects of early protein and carbohydrate starvation on the behavior and learning of both children and laboratory animals (Saadeh 1974 and Smith 1975). Likewise, there is an abundance of evidence that vitamin and other nutrient deficiencies adversely affect animal and human behavior (Pfeiffer 1975; Barnett 1963; and Munn 1950). We are frequently told by representatives of the medical establishment, however, that these deficiencies do not exist. Many family physicians rarely consider nutritional deficiencies when evaluating their patients. Perhaps the reason for this is that the average physician knows as much about nutrition as the average secretary. This is what the noted nutritional authority Dr. Jean Mayer found in his study of resident physicians at Harvard (as quoted in Cheraskin and Ringsdorf with Brecher 1974). Dr. Mayer also found that if the secretary has a weight problem then she will usually know more about nutrition than the average doctor. It is the Food and Nutrition Board that determines the Recommended Daily Allowances of vitamins, minerals, and proteins for healthy individuals. Since these amounts are rarely all consumed by selected samples of healthy persons, we must be suspect about the nutrition of the population of ED children we are currently identifying (Cheraskin, et. al., 1974). Again, these are children whose behavior is resistant to change under circumstances which normally produce change and, therefore, they should not be considered representative of "normal," "healthy" persons.

According to another noted nutritional authority, Dr. Roger Williams, the typical individual probably has average needs for most nutrients but has extraordinary needs for some nutrients (Williams 1971). The Food and Nutrition Board does not have adequate basic information, he claims, to know what percentage of the population will have their needs met by the proposed and frequently revised RDAs. Dr. Williams' research and that of others has shown that biochemically our needs for various nutrients may vary by a factor of anywhere from five to ten percent (Williams 1977). Since the ED students we are currently identifying are far from the typical, healthy individuals for whom the RDAs were established, it is very possible that their nutritional needs are extraordinary.

To illustrate the importance of nutrition upon mental health we have only to recall that earlier in this century hundreds of thousands of patients in mental institutions in the southern United States were cured by adding Vitamin B_3 or niacin to their diets (Hoffer 1973). These patients exhibited the behavioral or mental symptoms of pellagra, the disease associated with niacin deficiency. Although there are other physical symptoms which accompany pellagra, the mental symptoms occur first when only niacin is absent from the diet. Since 1941 niacin has been added to white flour and has drastically reduced the incidence of pellagra. However, in cases of subclinical pellagra, which may occur in three to five percent of the population today, the symptoms of hyperactivity, hypersensitivity, depression, apprehension, fatigue, headache, or insomnia often occur (Green 1973; Hall 1975). Since there is a wide range of requirements for any specific nutrient that is needed by the

human brain, we cannot automatically rule out a question of a vitamin or other nutrient deficiency for a youngster without thorough biochemical evaluations (Williams 1956).

Just as nutrient deficits can contribute to problems for ED children, so can excesses of certain substances. Allergy, for example, is defined as "exaggerated or pathological reaction to substances, situations, or physical states that are without comparable effect on the average individual" (Webster's Seventh New Collegiate Dictionary, 1971). We are all familiar with the respiratory symptoms of hay fever sufferers who are allergic to the pollen of one or more plants. We are less likely to be aware that many allergies affect only the nervous system and that 60 to 80 percent of the general population are allergic to some environmental substance (Dickey 1976).

Rees has stated that the greatest offender of all allergens is food because of the extended time the allergen is in contact with the body (Rees 1973). Furthermore, it has been demonstrated in groups of psychiatric and neurotic adult patients and in delinquent adolescents that the vast majority of all groups tested demonstrated allergic reactions to one or more of the tested allergens, most of which were foods. For example, in a study of youngsters in a residential school for delinquent and failing adolescents, 86% were found to be allergic with behavioral manifestations (Klotz 1974). Dr. William Philpott has found allergic reactions in 92% of the schizophrenic patients he has tested, with a majority of these showing psychiatric symptoms upon exposure to allergens (Newbold, Philpott, and Mandell 1973). In fact, in almost all cases tested, behavioral and emotional problems could be turned on and off by presentation and withdrawal of the allergen.

Wunderlich provides a good example of how an allergy produced serious emotional problems in a twelve year old girl (Wunderlich 1978). This patient showed numerous psychosomatic symptoms although no infection could be detected. Very often she could not control her emotions, she cried uncontrollably, and she had to receive her schooling at home. Gastrointestinal x-rays showed peptic ulcer disease, an electroencephalogram found abnormal brain waves, and six hour glucose tolerance test revealed hypoglycemia. A mineral analysis showed deficiencies of some minerals and an excess of toxic metals. All these symptoms were found to be the result of allergies which were treated with low doses of corticosteroids and allergy vaccine injections. Her symptoms were gradually alleviated and her interest in school work improved. Dr. Wunderlich lists five lessons to be learned from this and other similar cases. They are as follows: (1) a child may have chronic allergies from infancy with changes in the bodily organs which react to the allergen, (2) a child may not outgrow his or her allergy, and the symptoms may even grow worse, (3) a wide variety of symptoms may be produced by an allergy, (4) the allergy may need to be treated with a variety of techniques, and (5) the allergy may be accompanied by other biochemical disorders which make diagnosis and treatment more complex.

A special case of allergic type reactions has been proposed by Feingold who claims that about half of all hyperactive children are sensitive to salicylates which occur in many artificial food colors and flavorings and naturally in some foods (Feingold 1975). Although the Feingold hypothesis is controversial and even seems to be a political issue, most of the research supports his clinical findings that a substantial proportion of these children

can be helped by placing them on a special diet (Mayron 1979). Criticisms of the potential nutritional deficiencies produced by the diet seem to be unfounded. Minute amounts of this substance, salicylate, are enough to induce hyperactivity and drastic behavior problems in sensitive children for long periods of time. When salicylates are completely removed from the diet their behavior is vastly improved. A Dr. Jekyll-Mr. Hyde scene can be induced by adding this substance and taking it away from their diets. The acceptance of the success of the diet by one of its early and most respected critics, Dr. C. Keith Conners, lends much credibility to its therapeutic effectiveness (Conners 1976).

In some food allergies, according to Dr. Theron Randolph, a common occurrence to a food sensitivity is an immediate sharp reaction to a specific food. This is the kind of reaction we are most familiar with. Usually, the sufferer can relate the symptoms directly to the food because of their proximity in time, and he learns to avoid the food. However, there is another type of allergic reaction in which the onset of symptoms is delayed after eating the food allergen. Paradoxically, the onset of symptoms may even be postponed or partially relieved by eating more of the sensitizing food. A kind of food addiction then occurs as the allergen alternately causes "hangover" symptoms or a relative "high" (Randolph 1956). These kinds of allergies have been found in large percentages of psychiatric patients and in some chronic alcoholics (Philpott 1976).

As cited in a case study earlier, an abnormal glucose tolerance test or hypoglycemia was a coincidental problem caused by an allergy. Relative hypoglycemia or hyperinsulinism has often been reported to be a significant contributor to emotional and learning problems (Powers 1973-1974 and Abrahamson and Pezet 1951). Since the nervous system cannot store glucose the way muscles and other tissues can, the brain is particularly sensitive to a drop in blood glucose or sugar level. As reported by Dr. Carlton Fredericks (1976), it seems in some individuals that the consumption of simple carbohydrates can result in a paradoxical reduction in glucose levels in the blood. This happens because the sudden influx of glucose from the carbohydrates causes a sharp rise in blood glucose levels and an overreaction by pancreatic cells. The specialized cells in the pancreas, the islets of Langerhans, react in many people to rising blood glucose levels by overproducing insulin to regulate sugar levels. The insulin combines with glucose to help it pass more readily into the liver and muscles where it is stored. The overproduction of insulin, however, results in a glucose level that is often lower than before the carbohydrates were eaten. Symptoms of low blood sugar levels (hypoglycemia) are variable, but include dizziness, fainting or blackouts, fatigue, headaches, drowsiness, irritability, insomnia, hyperactivity, shakiness, poor concentration, uncoordination, and crying spells. Hunger and craving for sweets often accompany the numerous behavioral symptoms.

A single measure of blood glucose level is not sufficient to detect this condition. A five or six hour glucose tolerance test is a better way to evaluate the problem. Usually, the patient fasts overnight and goes directly to the hospital or physician's office before eating anything. There he consumes a measured amount of glucose, and his blood is draw at one hour intervals for five or six hours. The glucose level is measured and plotted on a graph. If the patient is hypoglycemic his graph will show a sharp rise, then two or three hours later it will drop below the fasting level. The

behavioral symptoms almost always accompany this reactive drop in blood sugar level (Fredericks 1976).

The same group of residential school adolescents mentioned earlier who were tested for allergies were also evaluated for hypoglycemia. More than half were clinically diagnosed as hypoglycemic with resulting behavioral manifestations (Klotz 1974). Likewise, Dr. Hugh Powers, a pediatrician in private practice in Dallas, has found that many of his patients, most of whom are referred for behavior and learning problems, exhibit a hypoglycemic reaction to six hour glucose tolerance tests (Powers 1973-1974). Strict diet control is usually all that is required to help these youngsters improve. Elimination of refined carbohydrates, an increase in protein consumption, and frequent small meals is a regimen usually followed (Cheraskin, et. al., 1974).

It has also been found that caffeine as consumed in coffee, colas, and chocolate can cause a drop in blood suger levels in hypoglycemics. As a matter of fact, caffeine has been implicated in neurotic disorders in adults and in some behavior and learning disorders in children (Powers 1975; Greden 1974). Caffeine is a drug which stimulates the adrenal glands to produce adrenalin which raises the blood sugar level and can cause the hypoglycemic cycle to begin. In large doses caffeine is a central nervous system stimulant which can result in unpredictable responses. Common experience and scientific research have shown that caffeine is addictive. Like all addictions, its users develop a tolerance for the drug, develop craving after periods of deprivation, and exhibit withdrawal symptoms when it is removed (Cheraskin, et. al., 1974). Caffeine from soft drinks (Pepsi, Coca Cola, Dr. Pepper, RC, and diet versions of these drinks), chocolates, tea, coffee, and some medications are ingested in large quantities by many youngsters with behavior and learning problems (Powers 1975).

Other metabolic poisons have been found in higher than normal quantities in biochemical studies of children who have difficulty adjusting to school. Researchers at McGill University matched 31 children with learning problems to 22 normal youngsters. Among other variables, the backgrounds and current environments of both groups were closely matched. Almost uniformly elevated lead and cadmium levels were found in the learning problem children as compared to the controls. The researchers felt the difference in levels of these two toxic metals was due to a metabolic problem in the learning disordered children and not to differences in exposure (Science News, October 22, 1977). Previously lead poisoning was thought to be a problem unique to inner city children; recent studies show, however, that children from well-to-do homes are being exposed to increasing amounts of lead in their homes and schools (Science News, November 5, 1977).

In another study reviewed by Pfeiffer, a group of hyperactive youngsters was compared to normal children and to a group of children known to have been lead poisoned. All three groups were given a chelating agent which combines with heavy metals and helps to flush them out of the body. The morning urine of each child was collected on the day following administration of the chelating agent. Lead excretion was found to be highest in the lead poisoned group, as expected. The lead excretion in the hyperactive group was about half that of the lead poisoned group. The lead in the normal group was only half that of the hyperactive group and only one-fourth that of the lead poisoned group (Pfeiffer 1975).

A recent study reported in the New England Journal of Medicine and reviewed in Science News (April 7, 1979), has found that youngsters who have even small amounts of lead deposited in their teeth have trouble paying attention in school. The researchers found that the degree of learning difficulties was correlated with the amount of lead in the child's teeth. These researchers also concluded that lower amounts of lead than previously thought can lead to learning and behavior problems for children. The possibility of a calcium deficiency or absorption problem in these children is raised by a study reported by Pfeiffer (1975). Calcium deficient rats were fed water contaminated with lead. It was found that the lead was deposited in bones and teeth in place of the lacking calcium.

Another pertinent study is also reported by Pfeiffer (1975). Rats of normal activity were fed lead carbonate and became hyperactive as a result. It was found the hyperactivity could be controlled by administrating the same stimulant drugs used to treat hyperactive children.

There are many other dietary and environmental toxins which can have an effect upon the human nervous system and behavior. One air pollutant, nitrogen dioxide, can stimulate psychiatric symptoms (Science News, February 17, 1979). Organic phosphate pesticides have recently been shown to be able to alter brain functions (Science News, December 16, 1978). Almost daily it seems that environmental pollutants are found which adversely affect human health, many of them affecting our mental health.

Another problem often associated with other human factors which may appear without apparent somatic causes is sleep disorders. George von Hilsheimer (1974) has described very aptly the "Henry Chicken Hawk" syndrome or functional narcolepsy in children. These youngsters, like the cartoon character, don't sleep well at night, but rarely are fully awake during the day. They often have a mussed-up appearance, sleepy eyes, a defiant face, and they fail to learn from their mistakes or from punishment. Most of us are aware of the results of the famous sleep deprivation studies which found decreased orientation and efficiency in adults after prolonged periods without sleep (Leukel 1972). Pearlman (Science News, August 28, 1976) has found that rats deprived of rapid eye movement (REM)sleep showed no later memory for training. He also found that students who were learning well in a language course showed increased REM sleep. Dreaming or REM sleep also seems to be necessary to help people cope with the day's emotional experiences. Pfeiffer (1975) has reported that REM sleep seems to vary with Vitamin B_6 levels in the body. The importance of sleep and the factors which can affect sleep cannot be over emphasized.

Since this paper is dealing with health factors it is incumbent that any suspected health problem which may be affecting a youngster's behavior and learning should be evaluated by a physician. Most of the health factors which have been discussed, however, are very subtle and are often overlooked in routine physical examinations. It becomes important, then, for those who have contact with a youngster to become alert to the signs and symptoms of these subtle health factors and to refer the child for appropriate medical care. Parents, teachers, support personnel, and consultants should familiarize themselves with the usual health problems which may accompany behavior and learning problems. They should also have access to questionnaires and observation devices which will aid them in screening youngsters for some of these problems.

In his book, Improving Your Child's Behavior Chemistry, pediatrician Dr. Lendon Smith includes a questionnaire scattered throughout the book (Smith 1976). There are 150 questions dealing with behavioral symptoms, pre- and postnatal history, diet preferences, sleep habits, and other areas. There is a scoring system, but there are no norms or cut off scores accompanying the questionnaire. The questions, however, are an excellent guide for interviewing parents and teachers in order to ferret out signs and symptoms which are medically significant but which often go undetected. Many of these questions are included in the sample health history found in the appendix. The more familiar the interviewer is with biobehavioral factors the greater the usefulness of the questionnaire.

Doctors Cheraskin and Ringsdorf (with Arline Brecher 1974) have in their book, Psychodietetics, a number of questionnaires dealing with nutritional and behavioral problems. Most of their questions are directed at adults, but many of them can be adapted for adolescents or younger children. An extensive questionnaire and observation form adapted from the two books just mentioned, and other sources, will be included in an appendix to this paper. A useful nutritional observation form, not included in this paper has been presented by Jani and Jani (1978).

As mandated by laws dealing with special education, health histories should be gathered on all youngsters who are referred for a diagnostic and educational team staffing and the school nurse may be helpful in this effort. Based upon personal experience, it is my guess that we too often do not pay enough attention to these health histories and may be discouraging our school nurses. Instead, we should encourage them to do more in-depth health histories and more detailed studies of current health status. We should not hesitate to refer or have school nurses refer students for special medical evaluations when there are strong indications of problems.

In dealing with medical problems of nutrition, parents and professionals should also keep in mind that the addition of supplemental vitamins and minerals to an otherwise poor diet will probably have little effect upon a child's health. It is common knowledge that the per capita consumption of sugar is currently more than 120 pounds. As Dr. Powers (1975) has found, this figure is probably much higher for youngsters with behavior and learning problems. Since sugar has no nutritive value, that is, it has no vitamins, minerals, or protein, it represents a large quantity of empty calories. These calories from sugar then displace calories from other foods which do have nutritive value. Either the youngster maintains a constant body weight without adequate nutrients, or he eats larger quantities of food in order to obtain needed nutrients and gains excess weight. A diet of unrefined carbohydrates, fresh fruits and vegetables, good sources of balanced protein, dairy products, non-hydrogenated vegetable oils, and in general, a wide variety of foods is most likely to meet the nutritional aspects of a youngster's physiological needs (Williams 1962). To this diet, supplemental vitamins, minerals, and amino acids may be added to meet any special needs the child may have. A diet diary kept by a parent or the child himself/herself is helpful in analyzing the adequacy of the youngster's diet. When this is not possible, a 24 hour diet recall is an acceptable way of sampling the adequacy of the youngster's diet.

Symptoms of allergies very often have behavioral and somatic symptoms. The well known tension-fatigue cycle is manifested in highs and lows in the behavior of many allergic children (Mayron 1979). Thus, hyperactive and hypoactive behavior may be seen in the same child. It is frequently reported that the behavior of these children varies considerably from one day to the next. Such a child may have dark, puffy circles under his/her eyes and/or a chronic runny nose. Cravings or addictions to certain foods may be detected if parents are questioned carefully. Use of a diet diary, as mentioned earlier, which includes anecdotal records or ratings of a youngster's daily behavior, is often helpful in establishing the relationship between foods and behavior.

Careful questioning of parents about a youngster's sleeping habits often must be done beyond that which is a part of most health histories. These questions should attempt to delineate the number of hours slept per night, whether or not the youngster talks or walks in his/her sleep, the youngster's attitude and demeanor upon awakening, the extent of restlessness during sleep, the frequency of nightmares, difficulties in falling asleep or awakening, schedules and routines in sleeping, the frequency of nocturnal enuresis or encopresis, and whether or not the child seems rested during the day. Sometimes it may be necessary to have the parents take some time to observe their youngsters as they sleep in order to answer these questions. If sleep problems are found the first step should be to consult with the child's physician. There are various methods that parents can use to help their youngsters sleep better, many of which can be used in conjunction with medical treatment. See von Hilsheimer's book Understanding Young People in Trouble (1974) for details.

This paper has touched upon a few of the health problems which seem to be prevalent in children with behavior and learning problems. No attempt has been made to exhaust all of the possible factors which may affect health and behavior, however, an extensive bibliography will accompany this paper.

It is now appropriate for the interested reader, to put the foregoing discussion into the perspective of identifying emotionally disabled youngsters. Usually when a youngster exhibits behavior problems the teacher and/or parents make attempts to cope with the problems. If their attempts do not meet with success, the procedure most often followed begins with a referral by the teacher or parent to support personnel. The next step usually involves the gathering of enough information to clearly specify the problems that are occurring with the child. After a careful analysis of the problem, attempts should be made to assist the teacher or parents in helping the youngster adapt. According to research on the effects of interventions into people's psychological problems, summarized in Bandura's Principles of Behavior Modification (1969), about two-thirds of the children with behavior problems should improve substantially at, or prior to this stage of the process. This proportion of troubled children seems to respond well to the attention given them whether or not it is from professionals. Bandura cites several studies showing that persons with little or no training are as effective at helping others as therapists and counselors who use traditional methods. This tells us that almost any intervention at this stage should help two-thirds of the children with behavior problems make satisfactory improvement with a minimal amount of help. It is irresponsible to label these children ED.

Thus far in the referral process we have filtered out two-thirds of our potential ED students. The next stage in the process of identification involves attempts to modify their behavior in the regular class setting. A few of these children may be found to be functioning with a mental disability and their behavior problems may disappear when they are placed in a more appropriate educational program. A few learning disabled youngsters may be identified who also respond well to different instructional approaches. The percentage of peculiar cases of youngsters who respond to curriculum changes or different teaching techniques is likely to be very small if the initial consultation with the referring party has been appropriate. By and large, then, the remaining one-third of the behavior problem children are likely to need major intervention in order to secure an appropriate education. It is these children who are in need of a highly structured educational environment, one which clarifies for the children and their teachers the antecedents and consequences of behavior. Haring and Phillips (1962) have demonstrated, as Frank Hewett (1968) has, the value of this approach in educating ED children. Likewise, Bandura (1969) has summarized the research which points to the efficacy of similar approaches, usually based upon social learning theory, in helping children and adults with behavior problems. The principles of behavior modification which are derived from social learning theory are very powerful and have even been used to successfully reduce the symptoms of some health factors (Moore 1965; Shapira and Schwartz 1973; and Miller, et. al., 1974). Researchers have consistently found social learning approaches to be more effective than most other behavior change therapies (Eysenck 1952; Levitt 1963; Wolpe 1976; and Ellis and Grieger 1977). The studies comparing the efficacy of behavior therapy with other approaches tend to find a success rate of approximately 90 percent. The 10 percent of persons with behavioral or emotional problems which are resistant to change would correspond to approximately one-third of the population of ED youngsters identified according to procedures outlined above. That is, even with intensive structure and effective therapy we may find at least one-third of our ED youngsters resistant to change.

As previously stated, the hypothesis of this paper suggests the resistance to learning of more adaptive and rewarding behavior by ED children may be due primarily to biological problems. To refine this hypothesis it is my contention that at least one-third of the students identified as ED, using the best identification and programming procedures, will be found to have a significantly greater number of the biobehavioral or health factors outlined in this paper. Furthermore, many other ED children beyond the one-third figure will probably show signs of biobehavioral symptoms indirectly proportionate to their improvement in a therapeutic educational environment. This hypothesis is stated in a way that can be measured and tested and it should be evaluated as soon as possible. A scoring procedure will be developed for the questionnaire accompanying this paper in order to quantify the signs of health problems in ED youngsters. Scores from questionnaires could be compared to gain scores on achievement tests, systematic behavior observations, behavior ratings scales or other pre-and post measures of student progress.

There is a tremendous need for doing other research concerning the relationship of health factors and behavior in ED students. Refinement of a health-problem questionnaire is needed. Reliability across interviewers and over short periods of time should be measured. The validity of the

questionnaire should be tested with medical evaluations and medical intervention effectiveness as the criteria.

Those who deal with ED children should be encouraged to become familiar with the health and biological factors which can affect the behavior of these children. This writter sees a pressing need for inservice training for teachers, support staff, and consultants by medical professionals who are familiar with the ecology of the ED child and have carried out research dealing with the field of biobehaviorism. This field of study is relatively new and is also very controversial because it challenges many of the basic assumptions of medicine, psychology, and sociology. It will take much courage, strength, and objectivity to face these challenges and to incorporate into our strategies for identifying and helping ED children any of the reasonable technology which is emerging from the applied research in biobehaviorism.

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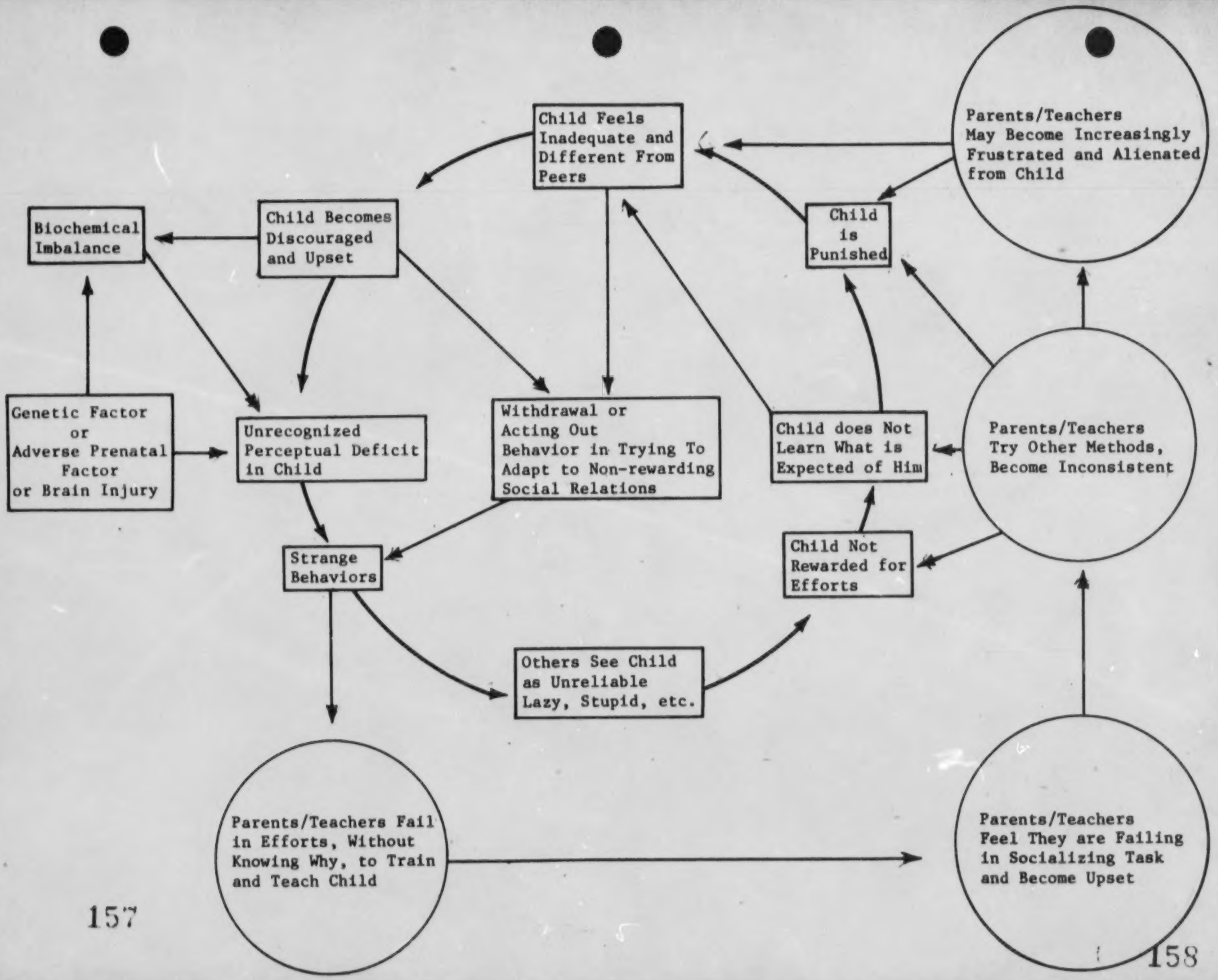
APPENDICES

I. Adaption of Kirk's (1973) diagram illustrating the etiology of schizophrenia.

II. A list of suggested readings which are widely available.

III. In-depth questionnaire.


Child Feels Inadequate and Different From Peers
Parents/Teachers May Become Increasingly Frustrated and Alienated from Child
Biochemical Imbalance
Child Becomes Discouraged and Upset
Child is Punished
Genetic Factor or Adverse Prenatal Factor or Brain Injury
Unrecognized Perceptual Deficit in Child
Withdrawal or Acting Out Behavior in Trying To Adapt to Non-rewarding Social Relations
Child does Not Learn What is Expected of Him
Parents/Teachers Try Other Methods, Become Inconsistent
Strange Behaviors
Child Not Rewarded for Efforts
Others See Child as Unreliable Lazy, Stupid, etc.
Parents/Teachers Fail in Efforts, Without Knowing Why, to Train and Teach Child
Parents/Teachers Feel They are Failing in Socializing Task and Become Upset

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IN-DEPTH QUESTIONNAIRE*

DATE _____

Identifying information by _____

Information given by _____
Relationship to child

1. CHILD'S NAME _____ AGE _____ BIRTHDATE _____
day month year

2. CHILDREN IN FAMILY _____ CHILD'S PLACE IN SIBLINGS: 1 2 3 4 5 6 7 8 9 10

3. FAMILY: Parents 1 or 2
Home broken by: separation ___ Age of child when home was
divorce ___ broken _____
death ___

Child lives with _____

4. FATHER: (Nat'l or Step) Name _____ Age _____

Health: Good ____ Average ____ Poor ____ Invalid ____

Occupation: _____

Education: Highest grade completed _____

Other training _____

Personal Information: Color eyes _____ Color hair _____

Color siblings' eyes _____

Color siblings' hair _____

Diabetes-yes ( ) no ( ) Alcoholism-yes ( ) no ( )

Obesity-yes ( ) no ( ) Bed-wetter-yes ( ) no ( )

Allergies-Occasional sneeze ( ) Hay fever ( )

Eczema, asthma, needs shots ( )

Bad temper, crime-yes ( ) no ( )

School failure, dyslexia-yes ( ) no ( )
If yes, explain _____

_____

Insomnia-yes ( ) no ( ) If yes, explain _____

_____

How much coffee and/or cola do you consume in a day?

_____

5. MOTHER: (Nat'l or Step) Name _____ Age _____

Maiden Name _____

Health: Good ____ Average ____ Poor ____ Invalid ____

Occupation: _____

Education: Highest grade completed _____

Other training _____

Personal Information: Color eyes _____ Color hair _____

Color siblings' eyes _____

Color siblings' hair _____

Diabetes-yes ( ) no ( ) Alcoholism-yes ( ) no ( )

Obesity-yes ( ) no ( ) Bed-wetter-yes ( ) no ( )

Allergies-Occasional sneeze ( ) Hay fever ( )

Eczema, asthma, needs shots ( )

Bad temper, crime-yes ( ) no ( )

School failure, dyxlexia-yes ( ) no ( )
If yes, explain _____

_____

Insomnia-yes ( ) no ( ) If yes, explain _____

_____

How much coffee and/or cola do you consume in a day?

_____

6. UNUSUAL CIRCUMSTANCES _____

_____

_____

_____

7. CHILDREN IN THE FAMILY:

Name	Sex	Age	Birthdate	Education	Check if living at home
1. _____	___	___	_____	_____	_____
2. _____	___	___	_____	_____	_____
3. _____	___	___	_____	_____	_____

8. OTHER PERSONS LIVING IN THE HOME:

Name	Sex	Age	Birthdate	Education	Relationship to family
1. _____	___	___	_____	_____	_____
2. _____	___	___	_____	_____	_____
3. _____	___	___	_____	_____	_____

9. PREGNANCY:

RH negative _____ Previous miscarriage? _____

Age of mother at baby's birth _____

Did you smoke during pregnancy? _____If yes, how much? _____

Was there bleeding or threatened miscarriage? _____

Did you experience accident or injury while pregnant? _____

Was the baby very active in the uterus? _____

What drugs or medications were taken during pregnancy? _____

_____

How often did you use alcohol? _____ narcotics? _____

Check any of the items below that apply to this pregnancy:

Anemia( ) High blood pressure( ) Toxemia( ) Convulsions( )

High fever( ) Rubella( ) Infections( ) Herpes( ) Pneumonia( )

Weight gain during pregnancy _____

Length in weeks of pregnancy _____

10. LABOR AND BIRTH HISTORY:

Child was: Premature ( ) Full Term ( ) Overdue ( ) Time _____

Child's condition at birth: _____

Labor was: Long - more than 20 hours. ( ) Short - less than 1 hr. ( )

Estimate time _____

Birth weight _____ Multiple _____ Single _____

What type anesthesia did you receive? _____

_____

Check any of the items below that apply to this birth:

Cesarean section( ) Placenta Praevia( ) Complications( )

Breech, face, or transverse presentation( )

What was the baby's APGAR score? _____

Did any of the following apply to your baby at birth? Check any that did.

Head molding( ) Forceps marks( ) Bumps on head( ) Jaundice( )

Needed oxygen( ) Incubator( ) Poor sucking( ) Exchange transfusion( )

What was your baby's activity level after a few hours? _____

_____

Is child adopted? _____ Child's age at adoption _____

11. DEVELOPMENT:

Smiled socially: by 6 weeks( ) after 6 weeks( )

Turned over: by 6 months( ) after 6 months( )

Sat alone: by 8 months( ) after 8 months( )

Crawled: by 9 months( ) after 9 months( )

Walked alone: by 15 months( ) after 15 months( )

Was he/she active or quiet as a baby? _____ Cry excessively? _____

Any difficulties in feeding? _____

Fed self with fingers: by 1 year( ) after 1 year( )

Fed self with spoon: by 15 months( ) after 15 months( )

Was toilet training a problem? _____

When completely trained? Boy: by 3 years( ) after 3 years( )
Girl: by 2 years( ) after 2 years( )

Does the child wet the bed now? _____

Does child wet or soil him/herself during the day? _____

Does he/she put on clothes by self except for tying or buttoning? _____

Dressed self: by 5 years( ) after 5 years( )

Does child: 1. Cut with scissors _____
2. Play games with a ball _____
3. Climb or jump _____
4. Draw _____
5. Run _____

Which hand does your child use to cut, draw, and eat with?

Right( ) Left( ) Both equally( )

Does child fail frequently? _____

Color of eyes _____ Color of hair _____

Activity level: Inactive( ) Normal( ) Busy( ) Constantly moving ( )

Ticklish: Slightly( ) Some( ) Very, painful( )

Craves sugar: Never( ) If offered( ) Steals it( )

Sleep resistance? Never( ) Occasional( ) Up late always( )

Deep sleep and bed wetting? Never( ) Twice( ) Constant( )

12. PHYSICAL AND MEDICAL HISTORY:

Has child been back in the hospital since birth? _____

Where _____

If so, explain (operations, accidents, etc.). Give age at time _____

_____

_____

Any other serious illness? _____ If yes, describe _____

_____

_____

Check if any of the following apply to your child:

Head injury( ) Concussion( ) Dehydration( ) Pneumonia( )
High fever( ) How high?_____ Inhaled object( )
Meningitis( ) Encephalitis( ) Convulsions( ) Twitches( )
Loss of consciousness( ) For how long? _____
Fainting spells( ) Dizziness( ) Weakness( ) Numbness( )
Tingling( )

What aches or pains or physical discomforts does child now have? _____

_____

Check any of the following which apply to your circumstances and child:

Eczema( ) Hay fever( ) Hives( ) Asthma in relatives( )
Many formula changes, used soy or goat's milk( )
Watery nasal discharge( ) Much sneezing( ) More than 8 colds a year( )
Many ear infections( ) Constant cough, wheeze, bronchitis( )
Needs antibiotics often to get over colds, infections( )
Vomiting, diarrhea, gas, constipation( ) Tension-fatigue( )
Circles under eyes( ) Pale( ) Excessively tired( )
Colic as a baby( ) Vomited when excited or overfed as a baby( )
Prefers sweets( ) Eats a lot, stays thin( ) Headaches( )
Picky and finicky with food( ) Loves caffeine-containing food( )
Eats constantly( ) (includes coffee, cola, and chocolate)
Sweets seem to cause hyperactivity( ) Stomach aches( )
Temper outbursts( ) Jekyll-Hyde behavior( ) Withdrawn( )
In another world( )

Does child take any medication regularly? _____

If yes, what? _____

_____

Date of last physical exam _____

Name of family or child's physician _____

Address of Doctor _____

13. HEARING:

Does child have any problem hearing? ___ Has child had ear infections, running ears, ears lanced? ____ If so, explain _____

_____

Has child's hearing been tested before now? _____ Where? _____

By whom? _____

Is there a history of hearing loss in the family? _____

14. VISION:

Does child seem to have a vision problem? ____Does child wear glasses? ___

_____ Explain: _____

Has child's vision been tested? _____ When? _____

By whom? _____

Address _____

15. SPEECH:

What difficulties did your child have in the development of speech?

_____

_____

Understood "no-no": by 1 year( ) after 1 year( )

Played pat-a-cake: by 1 year( ) after 1 year( )

Age when child said first word _____

Spoke in two- or three-word sentences? by 2 years( ) after 2 years ( )

How much of child's speech can mother understand? All _____
Most _____
Some _____

Does child hesitate or stutter? _____ Does child's voice sound like other children's? _____ If no, describe _____

Language other than English spoken in home _____

16. DID CHILD ATTEND PRE-SCHOOL? _____ Where _____

Any problems? _____ If so, explain _____

_____

17. DESCRIBE YOUR CHILD: Give examples such as happy, shy, restless, etc:

_____

_____

18. DOES CHILD EVIDENCE ANY OF THE FOLLOWING:

Check if any of the following apply --

Sleepiness during day( ) Insomnia( ) Restless, light sleep( )
Nightmares, terrors, sleep-walk( ) Late to bed, early to rise( )
Fears or worries that persist( ) Lack of energy( )
Temper tantrums( ) Cries easily for no reason( )
Bruises easily( ) Bleeding gums( )

Describe any behavior which is a problem: _____

_____

_____

19. WHAT ARE CHILD'S FAVORITE ACTIVITIES? _____

_____

20. WHO ORDINARILY DISCIPLINES YOUR CHILD? _____

What methods do you use to direct your child's behavior? Give examples, such as reasoning, scolding, etc.: _____

_____

How demonstrative is child in his/her affection? _____

Toward other children: _____

Toward parents: _____

21. EXCLUDING MOTHER AND FATHER, ARE THERE RELATIVES ON EITHER SIDE OF THE FAMILY WHO HAVE HAD:

Hearing problems _____ Epilepsy _____

Learning problems _____ Cerebral Palsy _____

Speech problems _____ Diabetes _____

Alcoholism _____ Mental Illness _____

* Portions of this questionnaire are from Smith (1976) and Cheraskin, et. al. (1974).

ACADEMIC ASSESSMENT IN THE IDENTIFICATION OF EMOTIONALLY DISABLED PUPILS

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Academic assessment in the process of identifying emotionally disabled pupils assumes its importance by nature of federal and state definitions. Lambert & Bower (1961) refer to an academic characteristic in their definition of emotional disabilities currently used under Public Law 94-142 as follows: "An inability to learn which cannot be explained by intellectual, sensory, or health factors." Similarly, the Rules of Special Education, Iowa Department of Public Instruction (1977) indicate that for an emotional disability to be educationally relevant it must be exhibited in the school setting, often resulting in interference with the learning process.

The commonly held assumption that emotionally disabled pupils also exhibit academic or educational disabilities has been researched with often conflicting results and little conclusive evidence of any cause-effect relationship. These discrepancies largely appear to be due to the differences in the samples of children in the various studies. As in most cases of behavioral research on broad classifications of disabilities, the heterogeneous placement of children into these specific categories tends to confuse and bias the results of the research (Bannatyne, 1974). Bower (1969) also discusses the difficulties presented by such a heterogeneous population as is found in emotional disabilities.

Spivack & Swift (1969) analyzed the relationship between academic achievement and classroom behavior, indicating that underachievement is evidenced not only in grades and test scores, but also in terms of maladaptive overt behavior exhibited in the classroom. Studies of specific academic areas by Jastak (1953) have shown that reading, as measured by the Wide Range Achievement Test (WRAT), tends to be one of the outstanding achievements of emotionally disturbed people. Further, he found reading achievement increases proportionately with the degree of disturbance. "A fearful, sensitive, insecure autistic child will learn to read faster than a child who perceives reality without fear." Jastak (1946) considered arithmetic disabilities to be indicative of severe personality disturbance and more often associated with personal maladjustments than reading disabilities. Many others studying the relationship between emotional disabilities and academic achievement report that children so identified were in fact deficient in both reading and arithmetic with the greater relative underachievement in arithmetic (Bower, 1960; Stone & Rowley, 1964). While Tamkin (1960) found that his sample had significantly lower scores in arithmetic than reading, he did not find any relationship between emotional disabilities and educational disabilities.

Others have speculated on the relationship of specific categories of emotional disabilities and general academic performance. Cattel & Cattel (1969) found ego strength to be positively related to academic performance. However, Stewert & Louisa (1976) found the opposite to be true. "The emotionally disturbed adolescent who is low in ego strength, tense, guilt prone, sensitive, shy, and submissive tended to be more intelligent and demonstrate better academic achievement." Graubard's (1964) study of conduct-problem pupils and underachievement supports the premise that ego strength is negatively related to academic performance on the grounds that his adjudicated subjects were below expected achievement levels in reading comprehension, and all showed some degree of disability in arithmetic computation. Werry (1968) looked at hyperactive children and also found a strong tendency toward underachievement with this population.

Many studies have indicated that emotional disabilities can be inferred from either a change in the rate at which an intellectual or educational ability develops across time or from fluctuations in the ability as measured at various points in time. These changes in rate of growth and fluctuations in achievement were reported by McHugh and others who found greater test variability in the emotionally disturbed child than in the normal child (McHugh, 1963; Woody, 1967; Petrie, 1962; Schoonover & Hertel, 1970).

Although research generally supports the relationship of emotional disabilities and academic underachievement, studies remain inconclusive. Until such time that more appropriate homogeneous placement of emotionally disabled children into research populations occurs, conflicting results will probably continue as to the specific nature and cause of their educational deficiencies.

Research which supplies us with behavioral observations during testing indicative of emotional disabilities is minimal. Sattler (1974) suggests general diagnostic indicators observable during testing that include irritability and suspiciousness, restlessness, lack of spontaneity, variable mood, apathy, euphoria and dysphoria. He goes on to describe language difficulties suggestive of emotional disturbance such as rambling, blocking, clang associations, circumlocution, confabulation, over-elaboration and self-reference. (See Figure 1.) Indications of an anxiety state observable in the test situation were noted by Freeman (1962) to include difficulty in finding words: impulsively blurting out unfinished, unchecked or inappropriate replies and fumbling about for adequate formulations.

The nature of the research does not provide us with any high degree of predictability or methodology to analyze academic achievement information thereby leading to a clear-cut diagnosis. At best, emotional disabilities can be inferred through analysis of academic data and the accompanying behavioral observations.

Academic assessment has a well established position in any special education evaluation and is not, by any means, specific to the area of emotional disabilities. However, the use of academic data can greatly assist in the identification process and should not be dismissed as routine or non-specific to the area. The usefulness of academic assessment data is determined by the focus and synthesis of such data with respect to all other areas of documentation. A logical approach to gathering and analyzing comprehensive academic assessment data for the purpose of aiding in the identification of emotionally disabled pupils is much needed.

Figure I

BEHAVIORAL OBSERVATIONS IN TESTING INDICATIVE OF EMOTIONAL DISABILITIES

1. IRRITABILITY - testy, edgy; easily annoyed
2. SUSPICIOUSNESS - mistrustful; imagining something is wrong on little evidence
3. RESTLESSNESS - unsettled, uneasy; continually on the move
4. LACK OF SPONTANEITY - absence of natural, voluntary or free will behavior
5. VARIABLE MOOD - changeable, unsteady disposition
6. APATHY - without feeling; indifferent
7. EUPHORIA - misleading or exaggerated sense of well-being not in keeping with real events

LANGUAGE DISTURBANCES IN TESTING INDICATIVE OF EMOTIONAL DISABILITIES

1. RAMBLING - incoherent talk; off task
2. BLOCKING - sudden difficulty in remembering; abrupt changes of subject; interruption of train of thought
3. CLANG ASSOCIATIONS - association of words or ideas with words because of similarity in sound; seen in psychosis
4. CIRCUMLOCUTION - round about manner of speaking
5. OVER ELABORATION - extensive clarification or examples
6. SELF REFERENCE - talking about self; consistently bringing topic around to one's self

The development of a comprehensive approach for obtaining and using relevant academic assessment data should logically begin with the diagnosticians asking two questions: (1) "What type of academic data is useful in identifying emotionally disabled pupils?" and (2) "What kinds and amounts of data can be considered sufficient documentation?". This needs assessment will lead to appropriate decision making regarding the personnel and instrumentation needed to gather the data.

WHAT ACADEMIC DATA IS USEFUL IN THE IDENTIFICATION PROCESS?

Six types of relevant and useful academic data will be considered as follows: (1) present level of functioning, (2) expectancy level, (3) rate of learning, (4) specific learning difficulties, (5) level of motivation and (6) previously attempted academic interventions.

1. PRESENT LEVEL OF KNOWLEDGE OR SKILL

Obtaining the pupil's current achievement level aids in determining if, and to what extent, suspected emotional difficulties may be interfering with learning. The need for this information is clearly evident in federal and state definitions, as mentioned earlier, which espouse the educational relevancy of emotional disabilities.

Of equal importance is the use of this information to serve as baseline data on which other data may be based and compared. A student may show quite adequate achievement levels on testing, but when results are compared with work samples, a discrepancy revealing low productivity in the classroom is obvious. When current level of functioning is compared with past achievement scores, the onset of learning problems can be viewed. A consistent history of an academic deficiency may accurately reflect a chronic learning problem which in turn may now have resulted in a secondary emotional disability. Likewise, a successful achievement pattern prior to a sudden change in performance leads to the further exploration of causes for such an interruption in learning.

This does not necessarily imply that a cause-effect relationship can be ascertained by establishing the current functioning level alone. However, such data, when combined with information from other documentation areas, leads to inferences about possible events precipitating the presenting difficulties.

As baseline data, knowledge of present level of functioning adds meaning to expectancy level, rate of learning and even post treatment data.

2. EXPECTANCY LEVEL OF KNOWLEDGE OR SKILL

The discrepancy in learning, which is established by comparing the derived expectancy with present level of functioning, is again central to the educational relevancy concept of emotional disabilities. The discrepancy between what the pupil is presently doing and what he/she is reasonably expected to do determines if an educational disability does in fact exist.

Expectancy may also serve to clarify the issue of determining the primary disability in those children who fall one to two standard deviations below the mean on measures of intellectual ability. Certainly such cases require in-depth documentation and close scrutiny to determine the appropriate diagnosis and program needs.

Although research generally indicates that there are no significant differences in the intellectual performance of emotionally disabled students and their normal peers (Rutter, 1964; Granick, 1955), it is extremely difficult to ascertain an accurate expectancy level due to non-intellectual emotional factors that interfere with all testing in general and more specifically with intellectual measurements. These non-intellectual factors which may interfere with the intellectual functioning of children were described by Weisskopf (1951) and include the following: anxiety, short attention span, poor self-esteem, immaturity and obsessiveness.

This word of caution is not meant to devalue the use of expectancy information in the identification of emotionally disabled pupils. It reflects the caution with which all data should be viewed, again emphasizing the need for extensive supportive documentation from all evaluation areas.

3. RATE OF LEARNING

Research reported earlier supports the use of information reflecting changes in rate of academic growth or fluctuations in achievement as being indicative of emotional disabilities. When reviewing the pupil's records for such test variability, disruptions in otherwise consistent linear academic improvement should be explored for possible corresponding changes in behavior, emotional stability or significant traumatic experience. Rate of growth data needs to be analyzed with respect to sociological and behavioral information obtained in other documentation areas.

4. SPECIFIC LEARNING DIFFICULTIES AND/OR LEARNING STYLE

Data on the existence of any special learning problems serves to clarify just what is taking place in the learning process for the pupil of concern. While this information tends to be more diagnostically specific and therefore more useful in program and planning decisions, it remains relevant to the identification process and may aid in clarification and determination of the primary disability. The relationship of emotional and educational disabilities, as cited earlier, results in emotionally disabled students and learning disabled students sharing many similar observable behavioral characteristics. Information from this area may serve to aid in distinguishing the two disabilities. The difficulties of differentiation remain, and may be clarified by Figure II.

Figure II

EMOTIONAL DISABILITIES AND LEARNING DISABILITIES

DIFFERENTIATION*

EMOTIONAL DISABILITIES	LEARNING DISABILITIES
1. Academic deficiencies are believed to be the result of inappropriate or interfering behaviors in the classroom.	1. Academic deficiencies are not the result of behavior, but deficits in psychological processes.
2. Behavior does not seem to respond to traditional classroom controls.	2. Although behavior may be inappropriate at times, it does respond to traditional controls.
3. Achievement and WISC profiles are often consistent though may be depressed.	3. Sporatic performance on achievement and WISC profiles.
4. Great difficulties with interpersonal relationships.	4. Although difficulties may be noted, ability to establish and maintain satisfactory interpersonal relationships exists.
5. Consistently inappropriate behavior under normal circumstances and across various types of situations.	5. May have trouble in particular academic settings, but does quite well in other situations.

* Carl Smith, Consultant-Emotional Disabilities, Iowa Department of Public Instruction

5. LEVEL OF MOTIVATION

The effects of motivation on achievement has been explored by Finch, Nelson & Pezzuti (1975) who found that emotionally disabled children who perceive a relationship between their own behavior and the resulting consequences obtain higher achievement scores than those who do not.

Lack of motivation is an often cited observable symptom of emotional difficulties. The possibility of motivational problems should be explored once intellectual, health and sensory factors have been ruled out as causes of learning deficits.

Motivation, as it relates to academic functioning, is an important parameter to be investigated. The lack of motivation can interfere or explain the information gathered in sections one through four above.

6. PRIOR ACADEMIC RELATED INTERVENTIONS

The nature of emotional disabilities makes it necessary to explore all possible classroom and intructional modifications available to the regular class teacher and his/her support staff prior to seeking the special services and the diagnostic label that it requires.

In addition to the above implications, documented interventions and their subsequent results may provide diagnostically important information regarding the type or extent of the presenting problem.

Securing data to respond to these six basic areas of useful diagnostic information will greatly assist the team in determining the educational relevancy of the possible emotional disability. Figure III summarizes useful academic assessment data.

Figure III

WHAT ACADEMIC INFORMATION IS HELPFUL IN DIAGNOSING EMOTIONAL DISABILITIES?

1. PRESENT LEVEL OF KNOWLEDGE OR SKILL - What is the pupil's current achievement level?

2. EXPECTANCY LEVEL OF KNOWLEDGE OR SKILL - What could reasonably be expected with his/her capacity?

3. RATE OF LEARNING, PARTICULARLY NOTING CHANGES IN PATTERN - Has the student been acquiring knowledge at a consistent rate over time?

4. SPECIFIC LEARNING DIFFICULTIES AND/OR LEARNING STYLE - Are there special learning problems? If so, are they indicative of another disability?

5. LEVEL OF MOTIVATION - What is the pupil's current level of motivation on academic related materials?

6. PRIOR ACADEMIC RELATED INTERVENTIONS - What classroom and academic modifications have been tried by the teacher and his/her support staff?

WHAT POTENTIAL INSTRUMENTATION IS AVAILABLE?

Once assessment needs are clearly defined, methodology for obtaining that information can be explored. There is not one individual test which supplies the needed information. A battery of diagnostic instruments capable of yielding a picture of the pupil which reflects the complexity of emotional disabilities should be used. Potential instrumentation is extensive and includes at least eight types of data collection:

1. Norm-referenced intellectual ability tests
2. Norm-referenced educational achievement/diagnostic tests
3. Criterion-referenced assessment tests
4. Work samples
5. Observation
6. Questionnaire or interview
7. Teacher estimates
8. Record review (grades, previous tests, etc.)

1. NORM-REFERENCED TESTS are psychometric instruments that are standardized on a particular population which becomes the referent. The primary function of such tests is to compare the child's performance to others of the same age or grade. Norm-referenced instruments used in educational assessment are generally of three types: (1) intellectual ability tests, (2) achievement or survey type tests and (3) diagnostic tests. Norm-referenced achievement tests survey current functioning levels in several academic areas and are designed in content for a variety of ages or grade levels. Norm-referenced diagnostic tests are similar but survey one academic area more extensively, providing more diagnostically relevant data.

Norm-referenced instruments generally have a limited number of items, not necessarily in developmental sequence. Therefore, the information obtained from such devices is diagnostically limited and general in nature, only confirming suspicions that the student is functioning below the level of his/her peers. Such tests also provide us with little assistance in determining specific skill attainment. Test responses do not indicate the processes underlying the passage of an item or the reasons for failure. Many believe that norm-referenced testing is an example of sacrificing diagnostic clinical thinking to statistical convenience. However, norm-referenced tests provide useful information about (1) current level of functioning, (2) expectancy level and (3) rate of learning when used in conjunction with other methods or types of instrumentation. Norm-referenced instruments must be valid and reliable.

2. CRITERION-REFERENCED TESTS are used to assess specific abilities and compare the child, not to other children, but to a set of standards. Such devices contain items arranged in developmental sequence within the specific area being assessed. Criterion-referenced tests are primarily designed to facilitate program planning where the concern is what has been mastered, then focusing on the next specific appropriate skill to be taught. However, because of the specific nature of such tests, they are often designed for certain groups, yielding them inappropriate for others. They also tend to measure "splinter skills" and may not provide a total picture of the child. Careful selection of criterion-referenced tests is essential. Criterion-referenced instruments can supply useful information about the pupil's present level of functioning.

3. WORK SAMPLES are an easily obtained method to view the pupil's typical functioning. If systematically collected over time to obtain more accurate data, the student's progress, skill development, motivation and possible learning problems may be inferred. Without a systematic method for analysis, there is little or no consistency from one evaluator to another.

4. OBSERVATION is the systematic watching and recording of the pupil's behavior within the typical school day. Observation is useful in noting present level of a skill, learning characteristics, interest and motivation, and patterns of adjustment. Using this technique, one can pick up on subtleties missed by other types of instrumentation. For observation to be of value, it must be systematically carried out over time. Some observational techniques useful for the area of academic assessment might include: (1) anecdotal records, logs, diaries, narratives; (2) videotape or audiotape recordings; (3) standardized observation devices; (4) flow logs or running records; and (5) systematic data collection.

5. QUESTIONNAIRES AND INTERVIEWS are direct approaches to obtaining information about the pupil's motivation and attitudes. Formal questionnaires are commercially available for the purpose of assessing academic related attitudes, and informal instruments may be devised.

Interviews may be structured or unstructured, with the former providing specific information more quickly. The diagnostic use of results must be questioned in regard to validity.

6. TEACHER ESTIMATES, if reliable, can provide excellent information about the student's expectancy level and special learning problems. However, such information may be strongly affected by the teacher's own biases and prejudices.

7. RECORD REVIEW provides pertinent antecedent data about the student's academic history and the situations affecting it. Palmer (1970) states that such information is vital "since it provides an estimate of both the rate of development and some of the past stresses or continuous stresses that may affect the child's current status." When conducting a record review, information on grades, attendance, previous testing, prior interventions, teacher comments, etc. are diagnostically significant when added to other test data.

A brief summary of the use, strengths and weaknesses of each data collection instrument is presented in Figure IV.

Figure IV

POTENTIAL INSTRUMENTATION

1. NORM-REFERENCED ACHIEVEMENT/DIAGNOSTIC TESTS

- surveys current level of achievement in several academic areas
- samples extensive content for a variety of ages and/or grades
- published norm is referent - how the child's performance compares to other children or the same grade or chronological age
- limited number of diagnostically useful items, not necessarily in developmental sequence
- must be valid and reliable

2. CRITERION-REFERENCED TESTS

- concerned with measuring the individual growth & progress of child
- large number of specific, developmentally sequenced items
- designed to measure only what has been learned
- mastery is referent
- provides specific information needed to arrange instruction

3. WORK SAMPLES

- displays typical functioning
- indicators of learning problems possible
- current level of motivation may be indicated
- easily obtained
- little consistency from evaluator to evaluator

4. OBSERVATION

- allows for view of typical behavior
- systematic procedures must be used to assure reliability
- can pick up on subtleties missed by other types of assessment
- provides information in many areas: (1) present level of skill, (2) learning characteristics of student, (3) interest and (4) attitude toward subject

5. QUESTIONNAIRES AND INTERVIEWS

- provides useful information about motivation and attitudes
- critical concern is that student responds truthfully

6. TEACHER ESTIMATES

- if reliable, can provide information about (1) expectancy level and (2) learning style and/or difficulties

7. RECORD REVIEW OF GRADES, PREVIOUS TESTS, ETC.

- provides historical perspective to learning patterns
- helpful in establishing learning rate

HOW CAN ASSESSMENT NEEDS AND POTENTIAL INSTRUMENTATION BE COMBINED TO PROVIDE ADEQUATE DOCUMENTATION?

The purpose of academic assessment is to collect and carefully interpret sufficient information to accurately determine specific educational needs. The degree to which assessment is systematic and thorough will determine the degree to which the educational program decisions are relevant and effective.

Assessment needs have been outlined, and potential instrumentation has been explored. The diagnosticians now need to ask the question, "Which type of instrumentation will supply us with appropriate and sufficient documentation information to adequately address the established assessment needs?"

A combination of the potential instruments previously discussed is generally the best way of obtaining the information that is needed in the identification process. The most important guides to the proper selection of these tools are the individual pupil and the diagnostician's judgment. A guide to determining what instruments will most accurately and efficiently provide the essential data is provided in Figure V. Preferences concerning which device to use for the purpose stated is marked with an asterick (*).

Figure V

INFORMATION NEEDS

INSTRUMENTATION	PRESENT LEVEL OF KNOWLEDGE OR SKILL	EXPECTANCY LEVEL OF KNOWLEDGE OR SKILL	RATE OF LEARNING	LEARNING DIFFICULTIES AND/OR STYLE	LEVEL OF MOTIVATION	PRIOR INTERVENTIONS
NORM-REFERENCED INTELLECTUAL ABILITY TESTS	NO	*YES	POSSIBLY	NO	NO	NO
NORM-REFERENCED EDUCATIONAL ACHIEVEMENT/DIAGNOSTIC TESTS	*YES	YES	*YES	NO	NO	NO
CRITERION-REFERENCED TESTS	*YES	NO	POSSIBLY	NO	NO	NO
WORK SAMPLES	POSSIBLY	NO	NO	POSSIBLY	POSSIBLY	POSSIBLY
OBSERVATION	POSSIBLY	NO	NO	*YES	YES	POSSIBLY
QUESTIONNAIRE OR INTERVIEW	NO	NO	NO	POSSIBLY	*YES	NO
PRIOR TEACHERS' ESTIMATES	NO	POSSIBLY	NO	POSSIBLY	NO	NO
RECORD REVIEW (GRADES, ETC.)	NO	NO	POSSIBLY	NO	NO	*YES

HOW DIAGNOSTIC INFORMATION IS SYNTHESIZED

Interpretation of the information obtained during the collection phase is the last step in the assessment process. Interpretation is the process of reviewing, analyzing and synthesizing all of the academic information on the child which has been collected. While a review and analysis of the data may be prepared by the individual clinician, generally the entire diagnostic team is involved in the synthesis process. Results can thereby be evaluated carefully in light of all other data collected by people with expertise in the various areas of documentation, and the results can be interpretated in terms of the total child.

Academic assessment data can best be synthesized in respect to the previously determined assessment needs as follows:

1. PRESENT LEVEL OF KNOWLEDGE OR SKILL - What has the pupil actually learned and what is his present achievement level?

A norm-referenced achievement test is generally administered to obtain present level of functioning data. The test results compare the pupil's performance with national or local norms, and are typically stated as a grade equivalency. Survey instruments provide a grade level score for each of the basic academic areas. The profile of abilities from these general scores may lead to the administration of more specific standardized diagnostic measures.

Criterion-referenced tests also provide present level of functioning data, describing explicitly what skills have been mastered and what skills are ready to be obtained. Work samples and observation may lend support to the statistical data supplied by the standardized instruments.

It should be remembered that due to the problem of error of measurement, it is never certain that a test score actually represents the pupil's present ability. Commonly used norm-referenced and criterion-referenced instruments useful in determining present level of functioning are in Appendix A.

2. EXPECTANCY LEVEL OF KNOWLEDGE OR SKILL - What is a reasonable expectation for the pupil, and how can that expectation best be measured?

Determining expectancy level is somewhat tenuous as it uses intelligence and achievement test results and the problems inherent in those measurements. However, it is necessary to aid the decision making process by using the quantitative data available.

Several methods for deriving expectancy level are used as follows: (1) standard scores, (2) mental grade formula (Harris, 1961), (3) years-in-school formula (Bond & Tinker, 1967) and (4) age expectancy formula (Harris, 1970).

Standard scores are comparable to the IQ deviation scores of standardized tests and can be used to roughly determine if a pupil is functioning up to his/her general expectancy level. By taking age into consideration, standard

scores interpret grade equivalency scores in a meaningful way. These scores or quotients are generally reported for each subtest of norm-referenced tests and may be compared with the results of formal intellectual measures to determine if the pupil is working up to his/her overall expectancy (IQ) in that specific area. An example follows:

WRAT SUBTEST	SS	WISC-R
Reading	98	Full Scale IQ 121
Spelling	93	
Arithmetic	117	

The reading Q of this student is 23 points below the IQ, the spelling Q is 28 points below the IQ, and the arithmetic Q is only 4 points below her IQ. This information, when supported by other data, indicates that reading and spelling are deficit areas in which he/she is not working up to his/her general expectancy level.

The mental grade method (Harris, 1961) provides a simple formula for deriving the pupil's reading expectancy based largely upon mental age:

RE (reading expectancy grade) = MA - 5

7.0 (RE) = 12 (MA) - 5

Tony is a ten year old fifth grader with an IQ of 120. His current reading achievement score is 4.7. Using this formula, Tony is 2.3 years below his expectancy even though he is currently only three months below grade placement. Determining when a discrepancy becomes significant is an obvious problem.

The years-in-school method (Bond & Tinker, 1967) takes into account the number of years of teaching exposure when determining a reading expectancy grade:

$$\text{RE (reading expectancy grade)} = \frac{\text{years in school} \times \text{IQ}}{100} + 1.0$$

$$\text{RE} = \frac{4.5 \times 120}{100} + 1.0 = 6.4$$

Tony is in the middle of the fifth grade and therefore has been in school for 4.5 years. Applying this formula, Tony's reading expectancy is 6.4.

The age expectancy method devised by Harris (1970) gives priority to intelligence:

$$EA \text{ (expectancy age)} = \frac{2\ MA + CA}{3}$$

$$(11 \text{ yrs.})\ EA = \frac{2\ (12)\ MA + (10.0)\ CA}{3}$$

Using this formula, Tony's expectancy age is eleven years, which corresponds to approximately sixth grade functioning.

Once the expectancy level is derived using any of the above three methods, a comparison to the present achievement scores can then be made to determine if, and to what extent, a discrepancy exists.

3. RATE OF LEARNING - How has the student's learning progressed historically?

Rate of learning can be determined by analyzing the results from comparable academic achievement and/or intelligence tests administered periodically over time. An example follows:

Grade	WRAT Reading Grade Score
2nd	2.5
3rd	3.7
4th	4.8
5th	5.1
6th	5.4

Viewing the above test results, one can tell that scores were at or above grade level until sixth grade at which time linear improvement slowed. In addition, the rate of growth dropped from more than a year's annual growth (+1.2, + 1.1) to only a few months growth from fifth grade to the sixth. This data of rate and fluctuations in learning can then be synthesized with respect to expectancy level information and sociological and behavioral findings. It should be remembered that there could be many reasons for such a pattern of performance change, only one of which may be emotional disabilities. All possibilities should be considered.

Although teacher grades (report cards) may be analyzed in much the same way as test scores, it should be remembered that grading systems, even at best, are not standardized, allowing for a great deal of subjectivity.

4. SPECIFIC LEARNING DIFFICULTIES AND/OR LEARNING STYLE - What special learning problems exist? If so, what is the primary disability?

Information regarding specific learning difficulties begins to form with the more general profile of results on survey instruments. For those subject areas found to be in deficit, norm-referenced diagnostic tests, criterion-referenced instruments and informal assessments provide more in-depth information about specific skill attainment. If still further

investigation is indicated, an evaluation of correlate areas or so called "splinter skills" and the various processes they represent should be included. Prior teachers may be able to provide invaluable information regarding learning difficulties and style. In addition, a trained, observant diagnostician can pick up on more subtle behavioral indicators of special problems and/or style both during the testing sessions and in the regular classroom setting.

Tests useful in determining special learning problems are included in Appendix A. An outline of observable indicators of learning disabilities is included in Appendix B.

5. LEVEL OF MOTIVATION - What is the student's present level of motivation and how is it affecting his/her academic performance?

Observation of the student for behavioral indicators of motivational problems should be conducted throughout the entire academic assessment process.

Questionnaires and interviews, both structured and informal, can provide insight into the role motivation might be playing in behavioral and academic concerns. Some commonly used informal techniques include: (1) sentence completion, (2) ranking of subjects, (3) checklist of study habits and (4) three wishes. Commercially prepared questionnaires are included in the test section of Appendix A. A sample of such a questionnaire is included in Appendix B.

Academic assessment data is central to the process of identifying emotionally disabled pupils and assessment should be conducted in a manner reflecting that importance. Assessment methodology should be selected for specific predetermined needs, covering the full range of potential instrumentation. The process should not be terminated until documentation clearly satisfying the determined assessment needs has been gathered and analyzed. Academic assessment draws its strength from supportive data. Therefore, final synthesis of assessment information should be conducted in light of all data collected by the various disciplines. This systematic but cautious approach will greatly assist the often times difficult task of identifying emotionally disabled pupils.

APPENDIX A

TEST AUTHOR	GRADE LEVEL	SKILLS MEASURED	SPECIAL FEATURES
I. NORM REFERENCED ACHIEVEMENT TESTS (SURVEY)			
Wide Range Achievement Test (Jastak & Jastak, 1965)	1-10	Reading Recognition Written Spelling Arithmetic	Individually administered Takes 10-15 minutes to administer
Iowa Test of Basic Skills (Lindquist & Hieronymous, 1956)	1-9	Traditional	Group administered Much verbal content
California Achievement Test (Tiegs & Clark, 1970)	1-9	Traditional	Group administered May be used diagnostically
SRA Achievement Series (Thorpe, Lefever, Naslund, 1969)	1-9	Traditional	Group administered Handbook for Diagnostic Analysis
Peabody Individual Achievement Test (Dunn & Markwardt, 1970)	K-adult	Math, Spelling, Reading Recognition, Reading Comprehension, General Information	Individually administered
II. NORM-REFERENCED DIAGNOSTIC TESTS			
Test of Written Spelling (Larsen & Hammill, 1976)	1-9	Predictable words Unpredictable words	Content chosen from often used spelling series
Key Math Diagnostic Arithmetic Test (Connely, Nachtman, Pritchett, 1976)	K-9	Content, Operations, Applications	Individually administered Little reading required Not really diagnostic, but useful in determining problem areas
Standard Reading Inventory (McCracken, 1966)	1-7	Word recognition Oral reading comprehension Speed, Word meaning	Individually administered

TI... AUTHOR	GRADE LEVEL	SKILLS MEASURED	SPECIAL FEATURES
II. NORM REFERENCED ACHIEVEMENT TESTS SURVEY (Continued)			
Diagnostic Reading Scales (Spache, 1963)	1-8	Instructional, Independent, potential reading levels	Individually administered Sophisticated interpretation required
Boehm Test of Basic Concepts (Boehm, 1971)	K-2	Frequently used school concepts	Group administered Use results to plan remediation
Durrell Analysis of Reading Difficulty (Durrell, 1955)	1-6	Silent & Oral reading Listening comprehension Word Analysis, Phonics Writing, Spelling	Individually Administered Observe faulty habits in reading
Woodcock Reading Mastery Tests (Woodcock, 1973)	1-9	Letter recognition Word recognition Word attack Word Comprehension Passage Comprehension	Individually administered Interpretation is on predicted individual performance
Gray Oral Reading Test (Gray & Robinson, 1967)	1-adult	Oral reading	Individually administered Use in addition to silent measure
Silent Reading Diagnostic test (Bond, Balow, Hoyt)	2-6	Words in isolation Words in context Visual-structural analysis Syllabication, Sounds	Group administered Supplement with individual test
Gilmore Oral Reading Test (Gilmore & Gilmore, 1968)	1-8	Reading accuracy Comprehension Reading rate	Individually administered Takes 15 minutes to administer

TEST AUTHOR	GRADE LEVEL	SKILLS MEASURED	SPECIAL FEATURE
III. CRITERION-REFERENCED ASSESSMENT INSTRUMENTS			
Diagnostic Tests & Self Helps in Arithmetic (Brueckner, 1955)	3-8	Computations Operations Measurement	Correlated with corrective self-help exercises
Diagnostic Spelling Test (Kottmeyer, 1970)	1-6	Traditional spelling	Dictation format Norm-referenced data available
Woodcock Reading Mastery Tests (Woodcock, 1973)	1-9	Letter recognition Word recognition Word attack Word comprehension Passage comprehension	Individually administered Norm-referenced data also available
Basic Concept Inventory (Engleman, 1967)	P-K	Concepts of verbal directions	Checklist format Devised for ED children
Brigance Diagnostic Inventory of Basic Skills (Brigance, 1977)	K-6	Readiness Reading Language Arts Math	Developmentally arranged Grade level scores available Extensive in coverage
Fundamental Processes in Arithmetic (Buswell & John)	1-9	Math computation	Excellent error analysis
IV. QUESTIONNAIRES AND INTERVIEWS			
What I Like to Do (Bonsall, Meyers, Thorpe)	1-6	Interests	
Evaluation of Attitudes Toward Arithmetic (Dutton & Adams, 1961)		Math attitudes	
Fundamental Processes in Arithmetic (Buswell & John)	1-9	Math computation	Error analysis through interview

APPENDIX B

OBSERVABLE CHARACTERISTICS INDICATIVE OF POSSIBLE LEARNING DISABILITY

I. Behavior

- Short attention span
- Easily distracted
- Hyperactive (constantly moving)
- Abilities inconsistent - what he/she can do one day, he/she may not be able to do the following day

II. Motor

- Poor coordination - gross, fine and visual motor
- Problems of balance
- Lack of rhythm in movements
- Inability to sustain a given movement - pattern loses sequence
- Confusion as to which is the right side and which is the left side of his/her body

III. Ocular

- Eyes cannot follow target
- Eye movements jerky
- Eyes do not work together
- Unable to do concentrated visual activities for average lengths of time

IV. Visual

- Inability to distinguish shapes
- Inability to see relationship of parts to the whole
- Confuses directions
- Cannot separate figure from background
- Difficulty retaining visual image
- Poor spatial orientation

V. Auditory

- Inability to differentiate similar sounds
- Doesn't always interpret correctly what is heard
- Inability to follow verbal directions
- Can't remember specific sounds
- Can't hear or remember sequences
- Unable to identify sounds

VI. Academic

Reading

- small sight-word vocabulary
- Poor word attack skills
- Loses place in reading
- Confuses similar words and letters
- Difficulty hearing and learning phonetic sounds
- Skips phrases or sentences when reading
- Reverses certain letters (example: b and d) or words (example: saw and was) when reading
- Looks only at beginning letters when identifying word
- Uses fingers to follow along

Spelling

- Inability to associate correct sound with letter
- Incorrect order of letters in words

Writing

- Letter and word reversals
- Inability to stay on the line
- Can't change direction of movement
- Difficulty crossing lines
- Uneven size

- Improper spacing

- Poor formation of letters

Arithmetic

- Difficulty associating correct symbol with number

- Problems of sequence

- No immediate visual recognition of groupings

EVALUATION OF ATTITUDES TOWARD ARITHMETIC

DIRECTIONS: CHECK (X) ONLY THE STATEMENTS THAT EXPRESS YOUR FEELING TOWARD ARITHMETIC.

_____1. I FEEL ARITHMETIC IS AN IMPORTANT PART OF THE SCHOOL CURRICULUM

_____2. ARITHMETIC IS SOMETHING YOU HAVE TO DO EVEN THOUGH IT IS NOT ENJOYABLE

_____3. WORKING WITH NUMBERS IS FUN

_____4. I HAVE NEVER LIKED ARITHMETIC

_____5. ARITHMETIC THRILLS ME AND I LIKE IT BETTER THAN ANY OTHER SUBJECT

_____6. I GET NO SATISFACTION FROM STUDYING ARITHMETIC

_____7. I LIKE ARITHMETIC BECAUSE THE PROCEDURES ARE LOGICAL

_____8. I AM AFRAID OF DOING WORD PROBLEMS

_____9. I LIKE WORKING ALL TYPES OF ARITHMETIC PROBLEMS

_____10. I DETEST ARITHMETIC AND AVOID USING IT AT ALL TIMES

_____11. I HAVE A GROWING APPRECIATION OF ARITHMETIC THROUGH UNDERSTANDING ITS VALUES, APPLICATIONS AND PROCESSES

_____12. I AM COMPLETELY INDIFFERENT TO ARITHMETIC

_____13. I HAVE ALWAYS LIKED ARITHMETIC BECAUSE IT HAS PRESENTED ME WITH A CHALLENGE

_____14. I LIKE ARITHMETIC BUT I LIKE OTHER SUBJECTS JUST AS WELL

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THE USE OF HOME/FAMILY DATA IN THE IDENTIFICATION OF EMOTIONALLY DISABLED PUPILS

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The focus of this paper is the use of home and family data in the identification phase of planning and programming for the emotionally disabled (E.D.) student. Since the family environment is a vital part of the student's life and impacts daily on how he/she acts and feels about himself/herself, a student's disturbing or disruptive behavior at school may not be totally understood apart from an understanding of his/her home environment.

An assessment of the home environment will either provide valuable information about the pervasiveness of the student's disturbing behavior or confirm that it is primarily a school problem. If his/her behavior is found to be more pervasive and is characteristic of the student's general response to stress, authority, etc., one has a broader base of supportive information regarding an emotional disability. If, however, the problem is limited to the school and the classroom this might be more suggestive of the student's difficulty with the subject matter or with the personalities within the school. This possibility should always be considered. To believe that a child has one set of responses to school stresses and another set of responses for other stressful situations requires careful examination.

DURATION, INTENSITY, CONSISTENCY

While it is beyond the scope of this paper to list all of the behavior excesses and deficits possible and to describe the point at which they become significant in the identification of an emotionally disabled child, (this is particularly true when discussing children from preschool age to age 21) the descriptors of duration, intensity, and consistency are very helpful in sharpening the focus on the child with a behavior problem. These will be discussed in detail. They, however, form only a part of the description. While many different outlines can be suggested and general questions posed, questions unique to the individual situation need to be asked and the responses weighed before the total puzzle can be completed. These particular questions cannot be pre-identified with any great exactness since questions must be selected, regrouped, and rephrased for each new situation of each new child. Even as each child is unique from any other child so are one's family constellation, dynamics of interaction, expectations, values and pressures. In fact, each child within each home is raised within an entirely different family context than is his/her brother or sister (Dreikurs, 1964).

The term duration encourages a person to take a longitudinal view of the child in order to determine whether these present behaviors are situational and only recently acquired or whether they have been characteristic of the child across time. The use of the term duration requires one to ask when did this behavior first begin to present itself. Did it just recently appear full blown as it is currently being experienced in the classroom or did it gradually evolve across time and is characteristic of the student's way of responding to stress in his/her environment. For example, can the student's present aggressive behavior or explosiveness or impulsivity also be identified in formative stages at earlier ages as the student has interacted at home and in the community with siblings, peers, and adults.

Also included in the concept of duration is the length of time a particular incident of behavior lasts. One needs to decide if the duration

of the temper tantrum (or other expression of emotion) is appropriate. In evaluating the duration one can consider age appropriateness and situation appropriateness. While a two minute temper tantrum may be an acceptable length of duration for a five year old, a twenty minute tantrum would be considered to have a duration, even for that one incident, which extended beyond what is appropriate for the age.

The term consistency would cause inquiry as to whether or not the student also responds this way in situations which have similar dynamics or whether the student is responding only in the school environment. If consistency is identified in the type of response the student displays both in the home and in community relationships as well as the school, this strengthens the ability to say that this behavior is representative of the student's level of behavioral response and does describe the student's approach to authorities, failure, pressure, etc.

If the assessment demonstrates the consistency of the problem behavior across many relationships, this may support a conclusion of a disability. Also, the lack of total consistency, but the appearance of the problem behavior in settings other than the school likewise would be supportive data. Greater difficulty is presented when the problem is seen only in the school setting. Whether consistent or inconsistent, an important dimension of the home and family study is to look at the student's performance across environments. This would be adding one consideration beyond Smith's (1977) discussion of consistency, but it is one dimension possible with the inclusion of family data.

Intensity is a word which implies the strength of a particular behavior or emotion. Intensity describes the strength or excessiveness of a behavior as well as the strength or excessiveness of a feeling state or emotion. Parents can provide descriptions of incidents in which the student's intensity of response, either physically or verbally, concerned or upset them or others. These descriptions can be compared to the behavior experienced in school.

One example where consistency, duration, and intensity are appropriately used to describe the child's performance is the illustration of the hyperactive child. While hyperactivity is clearly observed in the classroom, it is also notable at the meal table, during visiting and in church, and wherever attention and sedentary position are expected. In this situation the home assessment corroborates with the classroom assessment. The home assessment frequently can provide additional information as to the consistency, intensity and duration of the behavior concerned.

PURPOSE OF THE FAMILY ASSESSMENT

In completing the family assessment, the concepts of duration, intensity and consistency are taken as one set of orientation. As the development of the child or adolescent is discussed with parents and other significant individuals, the social worker assesses whether the present behavior can be described as having a duration across the development of the child, or consistency across the school, home, and community environment or similar

intensity of expression in the home, school, and community. If this occurs, the assessment supports a finding of emotional disability within the child.

The home assessment focuses not only on the child's present behavior across environments, but also looks at the stimuli and expectations directed towards the child from the home and community environment. Is there consistency in the expectations the child is receiving from home and the school? If these expectations are in conflict or if there is a high degree of inconsistency, particularly in the parental interaction with the student, then effective programming for the child may not be fruitful and may serve to frustrate not only the child, but the adults involved in working with that child. Part of helping to alter the child's behavior may require some alteration of the expectations and responses given to the child in the out-of-school environment as well as in working with the child in school. For this reason alone it is important to realize that the home assessment serves two purposes: 1) assessment for the purpose of diagnosis of the emotionally disabled students and 2) data for program planning and/or special class placement. While the first goal is the identification of emotionally disabled students, the data which serves both of these purposes is, of necessity, gathered in one session. Data which helps to clearly understand the frequency, time, place and the presenting of stimulus for problem behavior will also be needed in order to provide interventions.

Gardner (1974) suggests that the home assessment is helpful in identifying whether or not the desirable behavior is present or absent from the child's repertoire or is inconsistently presented. Part of the determination of this fact is obtained through skillful discussion with the parents about their experience with the child. In discussing what the behavioral problems are as experienced in the home, it can be determined whether the desired school behaviors are totally absent, not rewarded or not appreciated in the home environment, and if the emotional behavior presented in the school is absent in the home environment. It can also be determined what behavior of the child is reinforced by whom and when, in what situation and with what degree of frequency. Also, one can determine what the parental attitudes are towards reinforcing the child for particular behaviors.

An attempt can be made to reconstruct the critical social learning experiences in the child's history which have strengthened the child's aggravating ways of behaving. An analysis can be made of the present events which trigger the behavior and those reinforcing aspects which serve to insure that the behavior continues to occur.

While the impact of negative feelings on the child is seen as forming the basis for his/her emotional disabilities there is no attempt here to blame parents. Often the tensions and anxieties which destructively develop between young parents are a result of the lack of preparation for parenthood. Demands of a screaming infant result in irritable, tired, anxious, and somewhat angry parents. This can easily lead to accusations which foster overprotectiveness, emotional distance, and estrangement. A child at times is manipulated into a destructive alliance with a parent's hostility toward the other. The interaction becomes destructive to all, but particularly to the most vulnerable - the child. Sometimes even the most stable and well meaning parents are unable to cope with one particular child and know it. It serves

no purpose to make them feel guilty. The constructive step is to help parents see the negative impact of recurrent interactions that cause disturbance in children. These pathological interactions can be changed with the support and insight provided by the school and family working together in an atmosphere of acceptance and trust.

FAMILY RELATIONSHIP FACTORS

In describing the hyperactive child, Dr. Renshaw (1974) also writes about the hyperanxious child. He describes this child as one who has been caught in the web of conflicting emotions and tensions between the parents. Dr. Renshaw's comment thus identifies another value of the home assessment. If behavior is partially in response to conflicting relationships within the home environment, then the home environment must also be dealt with at the same time the child is worked with in the school environment for behavior in the school environment to change.

In order for a child to be mentally healthy and to develop normally he/she must live in an emotional climate with adequate tolerance and resources for age-appropriate adaptive functioning. If these age-appropriate expectations are lacking and the child is "overprotected" or if the expectations are unrealistic, the change required may need to be made in this area also, as well as with the child.

Diagnostic and Statistical Manual (DSM III, 1977) lists the following family relationship factors as psycho-social stressers for children and adolescents. These are considered to be the types of relationships which need to be evaluated and explored in trying to determine whether a child is emotionally disabled.

1. Cold or distant relationship between parents.
2. Overly hostile relationship between parents.
3. Physical or mental disturbance in family members.
4. Overly hostile parental behavior towards child.
5. Parental intrusiveness.
6. Inconsistent parental control.
7. Insufficient parental control.
8. Insufficient social or cognitant stimulation.
9. Anomalous family situation, e.g. single parent, foster family.
10. Institutional rearing or, loss of nuclear family members.

Where these stressers exist there is a greater chance that a child will develop some emotional disability than if these relationships did not exist.

Data on these dimensions of family relationships evolve as one talks about the family and the family history and as one observes transactions occurring in that relationship. The determination of the presence of these conditions is a judgment based on the material obtained from the parents in the process of completing the student and family assessment.

In completing a family and student assessment one needs to recognize that a family is a system of interacting personalities and that an individual's feelings of security, self-worth, and identity are rooted in the family. The family is a dynamic system. Behavior, illness, or depression of one member impacts on all members. The child's behavior, as all behavior, is purposeful. It has meaning and can be understood in the context of the child's family of origin. The relationships within the family are more intense than in any other group in society. Hence they have significance for health or illness (Howells, 1971).

The situationally inappropriate behavior being questioned by school personnel is seldom a behavior which has developed overnight. Rather, it has a history of development. This is known as the etiology of the problem. Since this development has been influenced by the dynamics of the home and family environment of the child since birth, the behavior may tend to be excused or explained away by the adults in the family who have come to equate this behavior with the child. They see him/her as "withdrawn," "hard to control," "aggressive" etc., but they may not see that what they are doing and saying relates to the child's problem at school. While the behavior is indeed inappropriate for normal development and disruptive to the child's education, the parents may need help in order to alter their pattern of relating to the child. Certainly when the school and family can agree upon the approach which will be used consistently both in the home and in the school the best results will be obtained. Indeed, the cooperation of the parents is crucial since the child cannot receive programming without the concurrence of the parents.

ASSESSMENT IS CHILD FOCUSED

It is important to realize as we consider the value of home and community data in the identification of the emotionally disabled child that this is a process of assessment rather than exclusively one of data gathering. The Mental Health professional is looking at the child's behavior in the out-of-school context of family relationships and community experiences to see if this helps explain why the child is behaving as he/she is in school. The expectation is that he/she will explore very thoroughly the developmental years of the child as well as the child's present interactions. The mental health professional will be making an assessment of how this information helps to understand or explain the school behavior of the child (See Figure 1). The professional must have a background which is strong in the concepts of child development and an understanding of age-appropriate behavior in children and adolescents. It is from this orientation and understanding as well as from the experienced background of the mental health professional that he/she is able to provide meaningful data about the student's self concept.

A child does not develop emotional problems in a vacuum. The onset can be very early in life. Emotional difficulties and childhood disturbances may

demonstrate themselves in the child's behavior even immediately following birth (Silvano, 1959). Continuous or extensive crying, anxiety, eating disturbances, persistent thumb sucking, sleep disturbances, fecal retention, overactivity, stammering, temper tantrums, rituals, defiance and disobedience, aggression, hair pulling, and soiling and wetting beyond the age appropriate may all be seen in children. These are developmental behaviors which may indicate emotional disability. A carefully completed developmental history which looks at interactions between parent and child as well as the physical milestones will identify these signs of early disturbance.

Disturbance may manifest itself also in tics, stammering, and conduct disturbances ranging from daydreaming and problem solving in fantasy, through restlessness and overactivity, to disobedience, stubbornness, and aggressive anti-social acts and stealing. Many of these behaviors are representative of depression.

Unsatisfactory emotional development has been identified by D'Evlyn (1957) as extreme dependence on the teacher or classmates, resistance to classroom routine or group activity, tantrums, quarreling, fighting, stealing, lying, bragging, bullying, crying, teasing, destructiveness, withdrawal, fear of physical injury, truancy, school phobia, stuttering, and tics. These children will also have problems of interpersonal adjustment. They do not feel right about themselves, and their relationships to others are poor. These are children who feel rejected, dominated by others, deprived, jealous, or resentful; who have been overindulged, have physical defects, or have suffered prolonged illnesses.

D'Evlyn (1957) states, "Largely the product of his environment, the child can be understood only as one understands his environment which includes the people with whom he lives and who love him or hate him, and whom he in turn loves or hates." If the child's behavior is consistent with environmental expectations, it may be disrupting behavior to the school, but it may not be a sign of disturbance.

As an example, D'Evlyn suggests that in order to understand the meaning of stealing behavior to determine whether or not this is a sign of emotional problems, an answer to the following questions needs to be obtained from the home. While these questions are not sacred or the only ones which might be asked, it is important to note that D'Evlyn includes family relationships, size, and financial matters in the question she suggests.

1. How long has he/she been stealing?
2. What does he/she steal?
3. What does he/she do with the stolen objects?
4. What is the family constellation?
   - A. Number of adults in the home, and their relation to each other.
   - B. Other children's ages and sex.

C. Health of parents.

D. Financial status of family.

E. Parents working or not working.

A child who steals may or not be emotionally disabled. Variables in the family need to be assessed. Is the financial situation precarious? Is his/her stealing "senseless," related to felt deprivations, or perhaps supported by neighborhood values? Is this a sign of rejection or isolation? Can it be termed a form of "psychological" stealing as a compensation for lack of friends?

In attempting to understand the aggressive child the following questions are some which D'Evlyn suggests should be asked about the home environment.

1. How long has he/she shown this pattern of behavior?

2. What is the family picture?

   A. Does the child receive the affection, attention, and guidance he/she needs for his/her age of development?

   B. Are there brothers and sisters in the family, and if so, what is this child's relationship to them?

   C. Is he/she as well accepted by the parents as the other children are, or do the parents show favoritism toward one or the other children in the family?

A study of these questions makes clear that we are trying to discover what in the child's life has disturbed his/her interpersonal relations with others. The child who has good feeling about his/her own worth and acceptance by others does not have to fight people as the aggressive child does. It is this type of thinking and application of knowledge which is required of the worker in the process of determining the relative meaning or lack of meaning of information received from parents in the process of completing the home assessment.

In order for the child's behavior to be understood one needs to ask the question, "What is this performance netting the student?" "What is the purpose of his/her behaving the way he/she does?" "Does it tend to keep people at a distance?" "Does it allow the child not to accept responsibility?" "Does it maintain a power struggle for him/her with authority figures?" "Does it serve to keep mother and father divided, and/or does it perhaps maintain his/her "problem" role in the family?"

FAMILY ASSESSMENT STARTS WITH THE SCHOOL PROGRAM

The awareness of a child's problem frequently starts with the teacher who identifies the child whose behavior is interfering with his/her ability to

learn. This is felt to adversely affect his/her educational performance if left as it is. Once the child is referred and the diagnostic process begins, the mental health professional who will be completing the family assessment needs to spend whatever time is necessary obtaining a clear picture of the specific behaviors which are presenting the problem for the teacher in the school environment. He/she needs to ask such questions such as, "What are the specific behaviors which are creating the problem?" "When do they occur?" "What seems to be happening immediately prior to the presentation of this behavior?" "In other words, what seem to be the contributing factors?" "What is the frequency of this behavior?" "How often does it happen and what interventions have been tried?" Also, "What has been the student's response to interventions which have been tried and who have been the individuals involved thus far in trying to work with the child?" The collection of data from the home and family begins only after having developed a clear description of the child's presenting behavior. The home assessment will attempt to provide additional information in the attempt to answer why the child acts as he/she does, what purpose his/her behavior seems to serve, and whether this behavior is situational or descriptive of an emotional disability.

Once the school problem is clear in the professional's mind, the home and family assessment can be made. In the process of gathering family history data and data on current interactions, the important question to remember is "How does this information relate to an understanding of the problem behaviors presented at the school?" Since the professional carries with him/her the responsibility of synthesizing the history and other data gathered so that the dynamics of the student's behavior can be understood, this process is described as a psychosocial assessment (Hamilton, Perlman). This phraseology adequately addresses itself to the interplay of feelings, perceptions, and relationships as the basis of behavior. It is understood that similar observable manifest behaviors can have multiple etiologies or origins, i.e. a particularly troublesome school behavior problem can be the result of emotional disability, cultural or neighborhood value systems, mental disability, etc. (See Figure 2). Examples are many, including stealing, lying, temper, temper outbursts, etc. The professional completing the home assessment should be expected to describe the development of the student and the past and present family relationships in dynamic terms, i.e. how they have and still do impact on the student.

Valuable support information pertinent to identification of an E.D. student (identified in the Iowa definition and in 94-142) may be obtained from the parent in the following areas:

1. Difficulties in interpersonal relationships. A discussion of play experiences, friendships, rivalries, conflicts, etc., may demonstrate that a student is unable to relate satisfactorily with those individuals in his/her immediate environment and has had difficulty in interpersonal relationships before. The same type of difficulties may also exist in community or other organized group activities.

2. Behaviors which deviate substantially from behavior appropriate to one's age. A discussion of interests the student maintains outside

of school and the behaviors in the home environment which are most descriptive of the student, may provide a broad basis for determining the situation and age appropriateness of the student's general behavioral expression. Other examples of age-inappropriate behavior may be described by parents.

3. Behaviors which interfere with the personal adjustment of the student. If the student's personal adjustment is impaired in that he/she is unable to maintain a sufficient degree of personal comfort in coping with everyday events in his/her environment, to the extent that excessive fears, somatic complaints, anxiety, and fluctuations in mood states occur, family data will often provide information as to the presence and expression of these behaviors.

4. Interferences with the learning process. Parents generally are concerned about child's school progress and about his/her sense of happiness and positiveness about school. When the child is having school difficulties, parents may know when it began to develop, how the student has responded to it, what he/she has said about the school situation and how he/she approaches handling his/her homework assignments now. Any or all of this information may be relevant in coming to a diagnosis.

5. A general pervasive mood of unhappiness or depression. These behaviors may frequently be much more evident to parents who have lived with the child all of his/her life. They may be able to describe, for example, the periods of time the student spends in his/her room by him/herself as well as his/her reactions to their attempts to involve him/her in family activity. These behaviors may be more clearly seen at home where the student's day is not as structured as it is at school.

6. A tendency to develop physical symptoms or fears associated with personal or school problems. One of the first clues parents have is the child's resistance to going to school. Physical complaints of not feeling well and fears of dogs or other students mistreating him/her are all generally heard by parents. The duration and intensity of the child's protests to the parents' insistence that he/she go to school will be relevant to a study of the child's emotional difficulty.

HOME ASSESSMENT FORMAT

In completing the family assessment, a cookbook approach is not possible. No checklist could ever focus in on the uniqueness of the individual student. For every behavior of interest the questions of how, when, how did you respond etc., need to be asked to determine at what point the problem behavior existed or originated solely within the child or was exacerbated by environmental inconsistencies, neglect, or deprivation. The intent is to look just at the child him/herself, then to the forces, pressures, and expectations which

impact on him/her from the social environments of the family annd community. The range of potentially valuable data is broad. Skill and professional training is needed to identify that which is relevant.

The data gathering phase has two parts. One is the skillful, sensitive, and purposeful phrasing and development of topics to be explored. The other is the assessment or conclusion which can be drawn from this data. This requires a background of preparation which allows seemingly individual and separate facts or behaviors to be linked together in a manner which gives meaning and understanding and which identifies a pattern.

The following list of relationships and events is offered as suggested areas for exploration in the family assessment interview.

1. Birth and delivery - normal or problematic.
2. Childhood development - within normal limits or problematic.
3. Family attitudes and expectations of family members - particularly the child.
4. Family relationships and child rearing patterns.
5. Traumatic events.
6. Health, illnesses, hospitalizations, injuries, seizures.
7. Losses and separations. (death, divorce, relocations)
8. Disciplinary patterns of parents and child's response.
9. Parents' expectations toward the child's school performance.
10. Present picture of child's performance in the home and community environment.
11. Parents' explanation of behavior present in the school.

The following assessment needs to be made about parenting roles, knowledge, capacity, and attitudes in order to attempt to find out if the problem is one of a social learning nature within the home environment or whether the problem developed regardless of the efforts of the parents to direct the child differently.

1. Are there deficits in the parents' knowledge of child growth and development or do they lack child management techniques?
2. Do parents hold erroneous attitudes or beliefs about how to relate to children.
3. Is there a presence or absence of positive interaction and encouragement?

4. How positive are the parents' feelings towards the child, their parenting role, the problem being presented by the child or the child's disability?

5. What explanations or beliefs do the parents hold as reason for the child's behavior?

Child specific areas include:

1. Relationship with peers. Nature and characteristics of interaction with peers and siblings, participation in formal and informal groups, quality of friendship, age-appropriateness.

2. Relationships with adults/parents. Quality of interaction, dependence on adults, acceptance of guidance and direction, communication, etc.

3. Emotional status. Level of maturity, age-appropriateness, impulse control, range and intensity of emotional expression, etc.

4. Student role performance. Attitudes toward school, school personnel, and assignments. Motivation, responsibility, etc.

5. Independent functioning. Nature and characteristics of resourcefulness and initiative to satisfy personal needs and to cope with environmental demands.

The home and family data can provide additional insights into the intensity, duration, and consistency of inappropriate behavior observed in the school setting, as well as provide additional information on the child's interpersonal relationships, personal adjustment, and age-appropriateness of behaviors and feelings under a broad range of circumstances. This data will be helpful in the identification and diagnosis of the emotionally disabled child.

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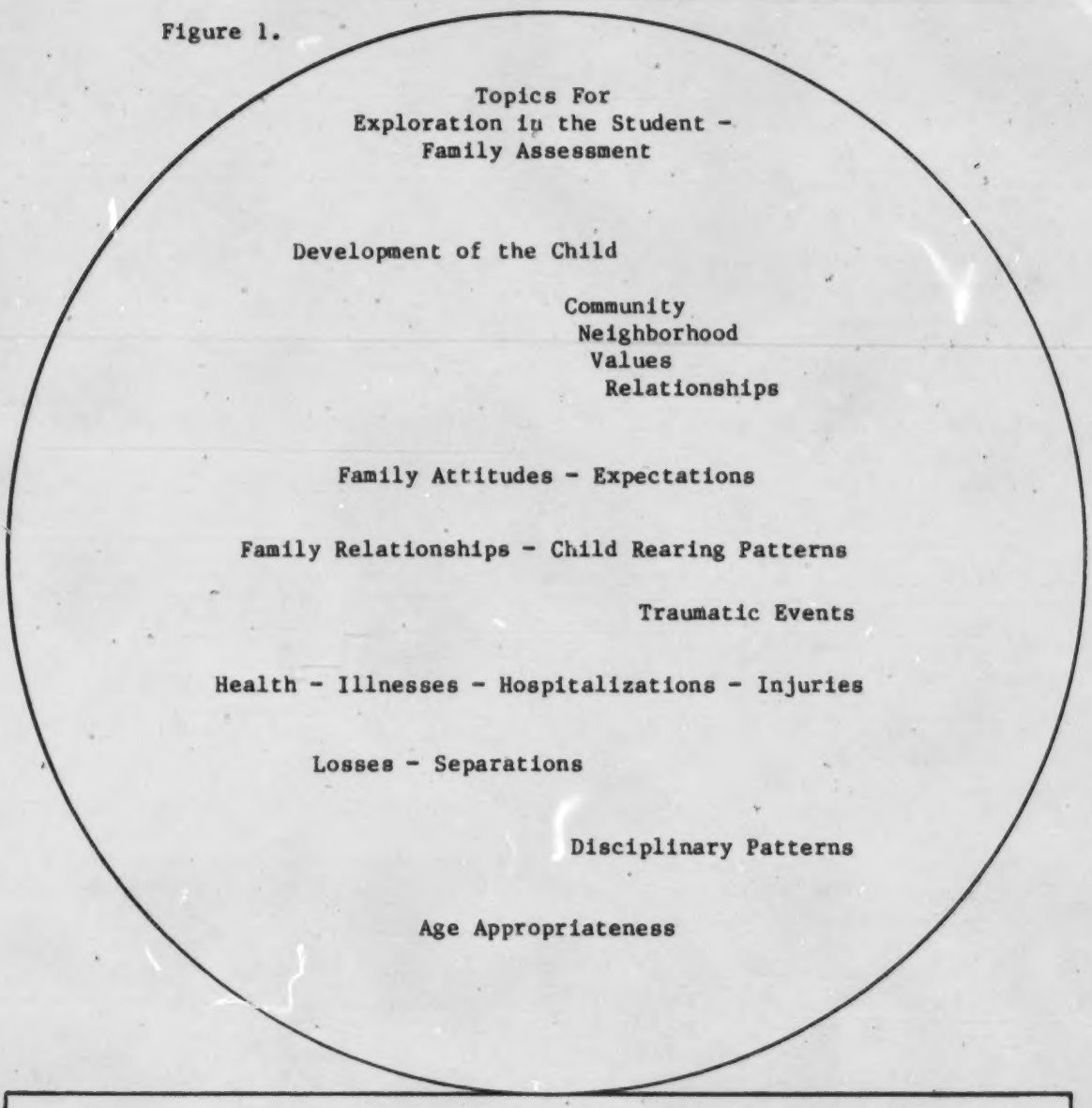
Figure 1.

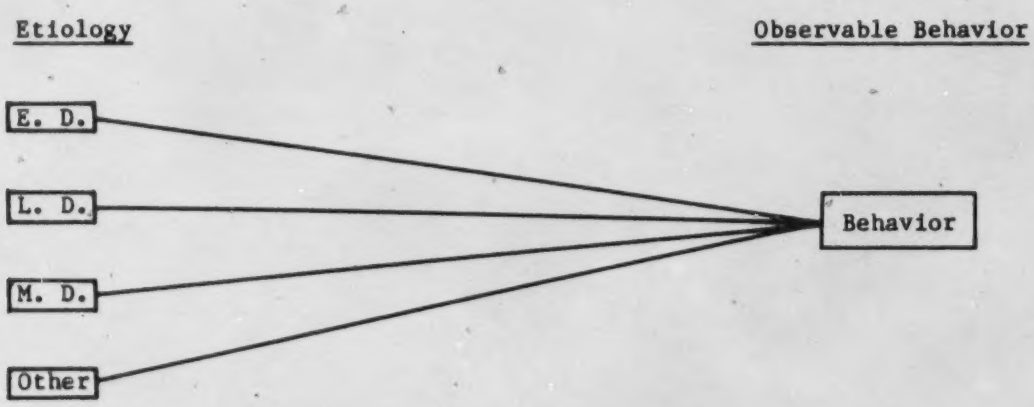


Professional Preparation of Mental Health Professional is the Filter

Relevance of Data to the Problem Presented by the Child

Rationale: Statement of Impact on Child and Explanation for Behavior.

Figure II. Multiple Origins of Behavior



(Source: Mississippi Bend Area Education Agency 9, E.D. Guideline, Tentative Draft, 1979.)

SOCIAL FUNCTIONING DATA

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INTRODUCTION

Recently educators have become increasingly conscious of the need for pupils within our schools to establish satisfactory social relationships with peers and adults and the role of such relationships in determining behavioral patterns. We have begun to realize the importance of social functioning in both academic and nonacademic activities. The purpose of this chapter is to provide the reader with an overview of theory, instrumentation/methodology and appropriate uses of social functioning data in the identification of emotionally disabled pupils.

Contemporary educators realize that there have been many situations present within our schools that have functioned to impede the development of appropriate social relationships among pupils. Examples of this include discouraging children from helping one another, emphasizing high performance and exaggerating competition, teacher favoritism, distributing school honors in an arbitrary fashion, and prohibiting gangs and the formation of groups. These examples illustrate ways by which our schools have often worked at cross-purpose with children who are attempting to solve one of life's most important adjustment problems--that of establishing a satisfactory relationship with one's peers. Social changes do take place in the schools and across many settings within our schools. It is often through the interpretation of social functioning data that changes are made to amend detrimental situations and/or facilitate positive ones.

Social functioning data seems to imply the gathering of information that gives or suggests insights as to the social status or social functioning level of pupils. The social setting or situation where data is gathered, for our purposes, will be the school. The gathering and use of social functioning data also suggests that sociological views and approaches are relevant.

As a teacher trainer, preparation of this chapter is biased by my desire to support the more intensive involvement of teachers in the identification process. The instrumentation/methodology presented were selected in part because of their teacher given design.

Information gathered from these instruments/methods may serve a dual purpose. First, this information may be used to assist in the identification of emotionally disabled pupils. Second, this information can assist in suggesting to the teacher social functioning levels of individuals in a class and, if correctly interpreted and effectively used, can allow for the establishment of a more positive learning environment for all.

THEORY

Professional questions (Salvia, Shultz & Chapin, 1974) have been presented dealing with such issues as the validity and/or reliability of social functioning data. Rather than to deal with these methodological issues, this writer has chosen to review theoretical research dealing with sociological views of child variance. Issues such as validity and reliability would be

crucial if one were proposing the use of social functioning data in isolation or as a sole criteria in identifying behaviorally deviant children. Such is not the case in this chapter. Social functioning data is perceived as but one area of data from which to make critical program decisions.

One explanation of the sociological view of child variance is:

> The human self is a creation of communication with others. The process involves 'taking the role of the other' in social communication. When two persons in communication are mutually taking the role of the other, they are able to assign isomorphic (mirror-image) meaning to the messages sent between them. A sender must be able to take the role of the other (the receiver) to know what meanings the receiver is giving to the symbols used by the sender. The social self arises through the process of repeatedly taking the role of the other and having the other take one's own role (Mead, 1934).

The diagnostic procedures employed in the gathering of social functioning data focus on the environment rather than on the deviant individual. According to this view, the school and the classroom function as a microcosm of the larger society. Conditions prevailing in society as a whole also exist in the educational institution to the extent that most of the subcultures present in the society are represented in the school's student population. However, the school is specifically designed to reflect and transmit the normative values of the mainstream while omitting the values inherent in the various subcultures. Deviant behavior is more noticed in schools than elsewhere and less deviance is permitted in schools. Like any other social group, a school or class has specific goals, membership, leadership and other roles. Social pressure can be used to motivate or to repress learning impulses, and to accept or reject behavior.

The gathering of social functioning data responds to individual and group behaviors that may be affected by the process of communication with peers. One's social status or functioning level is representative of peer and self-perceptions. Therefore, understanding the dynamics of class member's perceptions of self and others would be considered important to the management and individual pupil support within a classroom and to the identification of potentially emotionally disabled pupils. Research (Cowen, Pederson, Babigion, Izzo and Trost, 1973) has indicated that peer perceptions are accurate indicators of potential emotionally disabled pupils.

To adequately understand the data attempted to be gathered in using instruments/methodologies for social functioning information, one must become familiar with some assumptions stated in the sociological position. As stated earlier, this is where we find the theoretical and research premise for gathering social functioning data in the identification of behaviorally deviant children.

The following portion of this chapter is taken, in part, from A Study of Child Variance (Rhodes & Tracy, 1972), and the Videotape Training Packages in Child Variance, The Sociological Approach: A Self-Instructional Module (Morse & Smith, 1978). The inclusion of this material in this section is to assist the reader in further understanding the use of social functioning data.

In the 1920's the "Chicago school" of sociologists began a series of epidemiological studies which linked different environments with different rates of mental illness. This work eventually led to the Faris and Dunham book, Mental Disorders in Urban Areas (1930), which identified higher rates of mental illness in the center than in the outskirts of cities. The phenomenon was attributed to degrees of social disorganization in communities. Later epidemiological studies looked at mental illness across cultures (Eaton & Weil, 1953) and across social classes (Hollingshead & Redlich, 1958).

Other sociologists have studied mental illness as a form of social deviance. Such investigations included the study of the social conditions resulting in increased rates of mental illness, the social rules which govern social interaction (and are broken by the mentally ill) and the relationship between agents of social control and the rule-breakers. Emile Durkheim, a pioneer in this work, eventually formulated the concept of "anomie" in his well-known book, Suicide (1897, 1951). In the 1930's anthropologists such as Margaret Mead and Ruth Benedict initiated the cross-cultural analysis of mental illness as a form of deviance.

Since the first decades of this century sociologists have looked at psychological deviance from several different viewpoints. "Cultural transmission" theorists such as Shaw and McKay (1942) and, later, Sutherland (1960) emphasized the extent to which deviance is learned behavior, as opposed to innately determined. "Functionalists," such as Parsons (1951) and Merton (1957) maintained that the strain between conflicting social forces was responsible for determining rates of deviance. Others, such as Goffman (1961), Scheff (1966), Szasz (1963) and Becker (1963) have emphasized the process of labeling some individuals as deviant, and the subsequent stigmatizing effects of assuming a "sick" role in society.

From a sociological point of view, the schools are a mirror of dominant societal values, whose primary function is to socialize the young, i.e., to teach and perpetuate these values. A variety of racial, ethnic and socio-economic minority groups have proved resistant to this indoctrination and have prompted special actions by the educational establishment. Sociologists interpret the history of education in the light of these assumptions.

Periods in which environmental factors were assumed to cause mental illness, crime and other deviance were generally periods of reformist movements in this country. In the Jacksonian Era, the cause of deviance was assumed to lie within society itself. In the spirit of the times, the reformation of deviants was accepted as a social responsibility. To accomplish this, many institutions were created to maintain law and order. The system of free public schooling for all children was prompted by the desire to resocialize the children of the poor into the acceptance of middle class values, and thus to decrease crime and poverty and to ease the financial burden to society. Education was equated with morality and discipline. By 1851, the first form of compulsory education had come into existence in Massachusetts.

The Progressive Era of the early 1900's was another example of a reformist period. Education was seen as the key to social reform. Scientific IQ and

aptitude tests became the tools with which potential for school achievement could be measured. Guidance counseling and ability grouping became the means through which achievers and nonachievers were separated. Sociological research indicates that one outcome of such practices has been to generally maintain and affirm the position of the poor and less academically able in society.

The early 1960's again marked a period of reform. The ending of the de facto segregation was the overriding issue of the times. The concept of cultural deprivation became the modern version of the environmental cause of deviance. School integration was one intervention technique. This was accomplished via busing children into racially different neighborhoods and by removing artificial restrictions so that children could attend integrated schools in their own neighborhoods. Compensatory education also emerged in the form of preschool intervention programs, equal opportunity college preparation programs and bilingual and bicultural curricula for racial and ethnic minority groups. These intervention tactics have essentially the same assimilationist-reformist goals as earlier reform movements.

Toward the end of the 1960's the goal of equal access to a mono-cultural school program began to be questioned by minority groups in which a new sense of pride in their own culture and heritage was emerging. These groups sought a culturally pluralistic concept of education in which different cultural patterns and learning styles are respected. Cultural pluralism in education is a concept which is strongly influencing the direction of education today. Some minority scholars have taken a separatist view, insisting that the only way to maintain the values and goals of their culture is to have a system of schooling separate from that of the mainstream culture. They feel that this is the only way to acquire the knowledge and political consciousness which will preserve minorities from systematic acculturation and control by the dominant social order.

The overriding issue in the question of educational reform seems to be the extent to which schooling can correct the ills of society. Despite the emphasis on the power of educational reform in the past, many historians, sociologists and educators are now beginning to feel that educational reform may be ineffectual, or actually serving to hinder social reform by clouding over problems that originate in (and can only be resolved in) society at large. In any case, the interdependency of educational reform and social reform is strong, and this interdependency must be accommodated in the strategies of people concerned with social and educational change in the future.

The sociological position is often a disconcerting one since it frequently requires one to reexamine basic assumptions. Goals which are accepted as beneficial and humane in one era may become suspect in the analysis of the next generation. Actions which innovators intended to promote the general welfare may be ineffective or have a negative effect. When the sociologist describes such an event as "preserving the status quo" or furthering the subjugation of some social group, he is speaking in terms of an "after the fact" description of the effects rather than necessarily describing the motives of the innovator.

INSTRUMENTATION/METHODOLOGY

The choice of instruments to gather social functioning data should be based on the social situation or phenomena under investigation. It is important to remember that this type of data will give "situational measures," those which represent a moment in time. Various techniques may be used, including elements from anecdotal records, checklist/rating scales, informal observations and objective situational observations. However, self expression techniques are suggested as being a more direct measure of perceived social functioning. These may include autobiographies, compositions, oral expression, permissive discussion, questionnaires, personal data blanks, interviews, pupil self-evaluation, sociometric techniques and some projective techniques.

Bower-Lambert Scales

Bower (1969) describes a screening battery that appears to be comprehensive for both the individual child and his/her peer group within a classroom. This scale is designed for pupils in grades kindergarten-three, three-seven and seven-12. It represents a comprehensive model for screening that suggests promise for use in the identification of emotionally disabled pupils in the school setting. The procedure covers three domains; the teacher's perception of each child, the child's self-perception and the perceptions of each child by his/her peers. The measures dealing with each of these domains will be dealt with separately.

Teacher Perceptions

One of the most important and useful kinds of information obtained by the school is the teacher's professional judgement of his/her pupil's behavior. Teachers see children over a period of time in a variety of circumstances; in success situations, stress situations, at work and at play. Hopefully their judgement and observations have been sharpened by professional training and by day-to-day experience with normal behavior in children. Lambert and Hartsough (1973) have documented that when teachers are presented with specific directions in identifying pupil problem behavior that they are skilled at completing this task. Bower (1969) provides a teacher perception scale (Behavior Rating of Pupils) which can be used at all grade levels.

Pupil's Self Rating

A picture game (kindergarten-grade three) consists of 66 pictures, including two sample pictures. Each picture is illustrative of "normal" home and school relationships and events. With the exception of the two sample cards and the first ten pictures, each picture is emotionally neutral in the portrayal of the relationship or event. The child is asked to sort each

picture into one of two categories: "This is a happy picture" or "This is a sad picture." Note: The first ten pictures the child sorts are stereotypes: obviously happy or obviously sad situations. The purpose of including them in the test items is to check on each pupil's understanding of the task. Thus, if a child sorts the first ten pictures correctly you can be fairly sure that he/she understands the process well enough for you to use his/her score in screening.

Thinking about yourself (grades three-seven). The purpose of "thinking about yourself" is to elicit from the pupil an intra-self measure of the relationship between a pupil's perception of his/her environment and his/her conception of what it ought to be. What is looked for is the degree of discrepancy between a pupil's self-perception of him/herself as he/she is and as he/she would like to be.

Ex. This boy likes to do daring things.

Always Frequently Seldom Never

Are you like him? Do you want to be like him?

A self test (self-rating grades seven-12). A self test (like its third-seventh grade counterpart) is intended to obtain a measure of the difference between the way a pupil sees him/herself and the way he/she would like to be. In other words, it is a measure of the difference between self and ideal self. To the extent that a student is able to disclose the differences or similarities between these two aspects of self, the instrument is useful in screening.

The self-test contains 40 statements describing people behaving in a number of different ways. In section one, the student is asked to indicate how strongly he/she would like to be or would not like to be to the person described. In section II, the items are repeated and the student is asked to indicate how strongly they feel he/she is like or is not like the person described.

Note: On both "thinking about yourself" and a "self-test" some pupils with moderate or (serious) emotional problems cannot bring themselves to disclose the discomfort or dissatisfaction of self which this instrument invites them to disclose. There are other pupils, however, who do not manifest their difficulties to teacher or peers, but who respond to the opportunity to express inner discomfort and can communicate their concerns on a self-rating instrument.

Peer Rating

The peer rating instrument for kindergarten and primary grades, (K-two) the class pictures, must be given to each child in the class individually. This may take 15-20 minutes for each child. Administration of the class pictures to the entire class, however, may be spread over a period of time up to, but not over, one month. The class pictures are composed of twelve picture cards with a total of 20 scoring items (one or two items per card). The 20 items are divided as follows: five of the items are pictures of boys in situations related to emotionally disabled behavior; five are pictures of

girls in situations related to emotionally disabled behavior; five are pictures of boys in situations related to positive or neutral types of behavior; and five are pictures of girls in situations related to positive or neutral types of behavior.

On the test each child is to consider which of his/her classmates is most like the child in every one of the 20 situations. When the responses for each child are collected one counts the number of times a particular child is chosen for each of the twenty pictures. The total number of times a child is chosen for all of the pictures suggests how clearly or how vividly he/she is "seen" or perceived by his/her peers.

By dividing the number of times a child is picked for the 10 negative pictures by the total number of times he/she is picked for all 20 of the pictures, a percent, indicating the ratio of negative perception by peers, is obtained and used in screening. The mean or average number of negative selections of emotionally disabled boys and girls has been found to be significantly different from the mean number of negative selections in the general school population of that grade and sex. Consequently, the percent of negative perception has been found to be a reliable indicator of those children whose behavior, as observed by peers, indicates some degree of behavioral difficulty.

The peer rating instrument for grades three-seven is a class play. A class play is a peer rating instrument with greatest applicability in grades four, five and six, though it has been used with success in grades three and seven.

Section I of the instrument contains descriptions of 20 hypothetical roles in a play, with instructions directing each pupil to choose a classmate who would be most suitable and natural in each of the roles. A second section of the play elicits from each pupil an indication of the roles he/she would prefer, or thinks other people would prefer for the pupil to play.

The scoring of (A class play) is very much like the scoring of the class pictures. By counting the number of times a pupil is picked for each of the roles in the play, and then counting the number of times each pupil is picked for the even numbered (negative) roles, a percentage is obtained indicative of the positive or negative perception of each pupil by his/her classmates.

The student survey is the peer instrumentation for use in the junior and senior high schools. In order for this test to have validity, it is necessary to administer it to a class in which the students have had an opportunity for some social and intellectual interactions, as well as for observations of one another in a variety of classroom situations.

Section I of the "student survey" consists of twenty items. Ten are illustrative of emotionally disabled behavior and 10 are illustrative of neutral or positive behavior. For each statement of behavior, the students are asked to list the name of a classmate who is most like the student described in the item.

Section II of the student survey contains the same 20 behavior statements randomly arranged in five groups of four statements each. The student is asked to select one of the four statements in each group as the one which he/she thinks others in the class might apply to him/her self. The teacher is able to measure and analyze how a student sees him/her self in relationship to how others see him/her.

The Bower-Lambert scales are an example of a comprehensive screening instrument in the area of social functioning. Although they may appear to be somewhat cumbersome to teachers, the scales are relatively simple to administer and score. The data from tests are collected and weighted and result in an overall social functioning evaluation for each child.

Sociometric Techniques

The term sociometry has occurred with increasing frequency in educational literature during the past 20 to 30 years. Briefly stated, sociometry is concerned with the measurement of interpersonal preferences among the members of a group in reference to a stated criterion.

For teachers these techniques are not only measurement oriented but also suggest methods and principles to be followed in making groups (classes) more effective in pursuit of their goals both as a group and as individuals in a group. Since the chief focus of this discussion is on evaluation techniques, attention will be centered on the value of sociometric data as a source for understanding pupils' personalities. As contrasted with projective techniques, which aim to measure inner psychological states, the purpose of sociometric methods is to measure each individuals social stimulus value, or in other words his/her social worth or personal value as viewed by his/her group associates (peers).

Sociometric measurements are based on several assumptions. One of these is that within any formal organization such as that existing in a school class, there is an informal organization based on interpersonal attractions and repulsions, and that these informal relationships greatly affect the official functioning of the group, as well as having important personality consequences for each person in the group. Another important assumption of sociometry is that interpersonal bonds between the members of a group are necessary to positive individual development and the normal personality growth of each individual. A person is a social as well as biological being and, therefore, has a basic need for positive associations with others and for reciprocation of positive feelings. If these assumptions can be accepted then it follows that an adequate program for personality evaluation of pupils must include data on interpersonal relationships.

Types of Sociometric Measurements

Sociometric testing falls into two major categories. These are:

(1) The use of choices of specific criteria to serve a particular purpose at a particular time, and

(2) Questionnaires or rating instruments which measure interpersonal attitudes and feelings but not in respect to a specific functional-type criterion.

Within the preferences or specific criteria category one is asked their preference of choices i.e. "Which other pupils would you like to sit by?" or "Which students do you prefer to have in your play group." Thus, what is measured is not necessarily "social fact" but "social aspirations".

For teachers this presents criteria which can also be used to make changes in the social arrangement of a group, i.e. forming of subgroups.

The second major category of sociometric testing, questionnaires and rating instruments, asks the members of a group to indicate their feelings toward each other but not in reference to a specific criterion; nor is there expectation that some group changes will result from the testing. Usually sociometric questionnaires are considered primarily with measuring interpersonal feelings, as opposed to leadership qualities or desirability as a work-associate.

Ex. Ohio Social Acceptance Scale

1) my very, very best friends
2) my other friends
3) not friends, but okay
4) don't know them
5) don't care for them
6) dislike them

The class list is given and students are asked to put a number indicating his/her degree of positive, neutral or negative feelings.

USE OF SOCIAL FUNCTIONING DATA

In regard to the use of social functioning data it has been found that appropriate interpretation may have a dual purpose; in the identification of emotionally disabled children and the development of teacher intervention procedures.

First, as used in the identification of emotionally disabled youth, social functioning data gives indicators of the social functioning level of a particular student. Simply stated a youngster who is evaluated as having a low or inappropriate social functioning level may have emotional problem areas that are manifested through his/her behavior. Within a holistic approach to the identification procedures, this information represents one level of inquiry and should be treated as such. Placement or programming procedures based on such data should reflect an intervention that would hopefully enhance the social functioning level of the particular student being assessed.

In regard to teacher intervention procedures, this data can be used to assess the social setting of a classroom/school (i.e. social setting as determined by social status and roles of class/school members). With great precaution, a teacher may create social change through intervention that develops academic and behavior skills that will lessen the agitated exchange between the child and the community (class, school, etc.). This may be done through curricula specifically designed for social and personal learning. The teacher may also be involved in helping the community (class, school or individuals) within the child's eco-system to make some adjustments for individual differences.

Without exception, the social functioning level must be an area of inquiry in the identification of potential emotionally disabled students. It is further suggested that at least informal or non-standardized inquiry of social phenomena be made of the many subcommunities of school i.e. classroom, playground, physical education, etc.

From the Bower instruments (1969) the three domains of assessment reflect the area of inquiry (i.e. teacher's perception of each child, the child's self-perception and the perception of each child by his/her peers. Identifying children who may have emotional disabilities that are related to their social functioning level is in essence the outcome of interpretation. This data would need support from other areas of inquiry (academic, medical, family) before any placement or program decisions should be made. That is to say there should not be major decisions of how to intervene on behalf of a student based solely on this data. For the most part, however, the Bower instrument is used as a screening device in the identification process.

Sociometric techniques have more potential for teacher intervention use. Methods and principles to be followed in making groups (classes) more effective in pursuit of their goals, both as individuals and as a group are given.

For identification procedures, sociometric techniques are baseline data for supportive information in the social functioning level of a referred student.

CONCLUSION

One of the most crucial interventions we commit ourselves to as helping professions in special education is the process of identification. The outcome of labeling a child for programming is one which carries a great burden of responsibility. As we ask questions about a child, we imply that there are answers to be found.

The broader our range of questions, the more inclusive our information. A holistic approach to labeling a child is at present, our most responsive approach to this all important procedure.

This writer suggests that as one inquires into the social functioning level of a child, one has obtained one part of the whole, an important part most assuredly, but nevertheless only one part. This document suggests the use of the other parts to make the whole. To do so assures one of using the best of his/her professional capabilities in the process of identification. Let us respond to this process with judgements based on a holistic range of inquiry. With this done, we will have more fully attempted to secure an accurate identification, lending accountability to our role as helping professionals.

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TRANSLATING DATA INTO DECISION MAKING

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Although numerous goals for assessment have been reported in the literature, a major goal appears to be the acquisition of relevant information that will contribute to the decision-making process. Assessment should be a purposeful process, one which does not terminate in attaching labels. It should (a) lead to the clarification of the presenting problem and those factors which influence it; (b) assist in making decisions concerning the types of intervention needed and (c) provide a means to evaluate the effects of intervention.

Mash and Terdal (1974) state that it is the way assessment information is used that gives significance to the process. The purpose of this chapter is to provide guidelines for translating data into decision making. A brief overview of the assessment process and its application to the identification of emotionally disabled pupils is presented. It is hoped these guidelines will aid the multidisciplinary team in the assessment process and in the provision of optimal services to pupils.

The Assessment Process

Figure 1 is an assessment model which has been adapted from materials developed in 1978 at the Midwest Regional Resource Center (MRRC). It is apparent that a thorough analysis of the referral or statement of the problem must take place before the collection or use of data. There is a sample of a referral analysis sheet in the Resources for Assessment section at the end of this chapter. It is during the analysis of the referral that parents or guardians should become involved in the assessment process. They also should play an integral part in the collection and translation of the data.

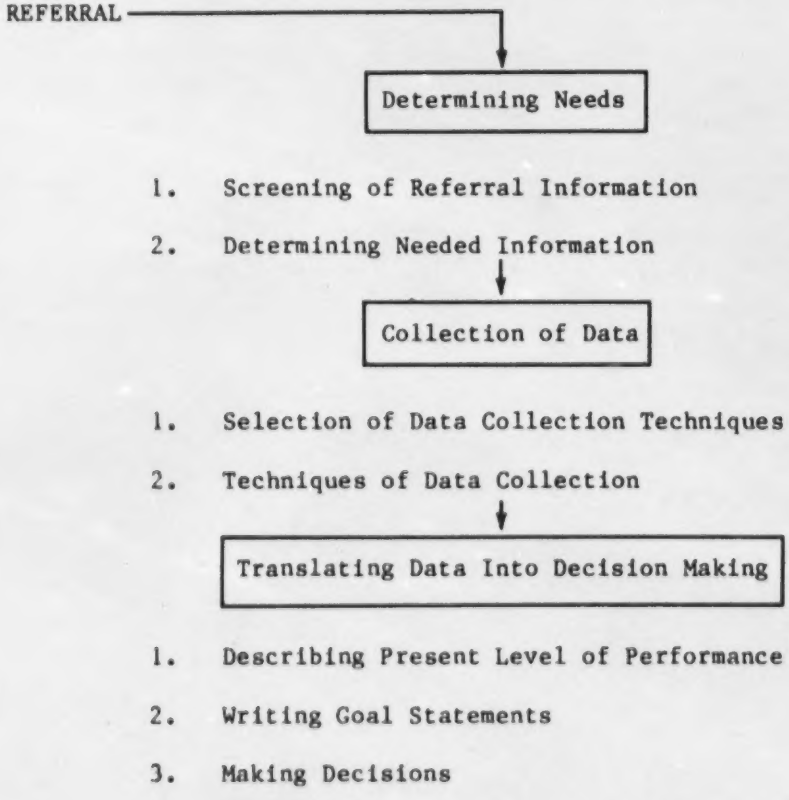
REFERRAL
Determining Needs
1. Screening of Referral Information
2. Determining Needed Information
Collection of Data
1. Selection of Data Collection Techniques
2. Techniques of Data Collection
Translating Data Into Decision Making
1. Describing Present Level of Performance
2. Writing Goal Statements
3. Making Decisions

Figure 1. The Assessment Process Model (Adapted form Holmes, Midwest Regional Resource Center, & Ford, 1978).

Once the determination of needs has taken place, one must decide what techniques to use to collect data. Goldberg (1971) discusses two viewpoints regarding the use of assessment information--the basic and applied science positions. The psychologist in the schools and other team members should be more concerned with the prediction of outcomes viewed by society as having importance (applied science) than the development of psychological theories (basic science). It is at this point, however, that the assessment team must exhibit knowledge of basic behavior/personality theory. The assessment strategies used by the team members should be the product of some accepted theoretical base. The collection of data seems to be controlled by our perceptions of the causes of problem behaviors.

Goldfried and Kent (1972) suggest that the basic assumption for traditional assessment is that consistencies in behavior (i.e., traits) exist independently of situational variables. They also suggest while the basic assumption for behavioral assessment is that human behavior is determined not only by the person's previous social learning history, but also by current environmental antecedents and/or consequences of the behavior in question. Whichever approach one uses, it becomes very important to ask "whether the questions raised within particular theoretical frameworks are more or less consistent with the types of questions being posed and the kinds of decisions characteristic of [applied] situations" (Mash & Terdal, 1976, p. 17).

Because the definition for emotional disability in the Rules of Special Education (State of Iowa, 1977) is behavioral in connotation and because some of the basic underlying assumptions regarding traditional assessment have not been supported by empirical evidence (Goldfried & Kent, 1972), it is the behavioral approach to assessment that is touted in this chapter.

The Resources for Assessment section contains an adaptation of Kanfer and Saslow's (1976) behavioral diagnosis outline as well as Holland's (1970) interview guide for behavioral conseling with parents. This guide could be used with school personnel as well as parents. These resources should be helpful in defining a pupil's problem in a manner which suggests specific treatment operations and suggests specific behaviors as targets for modification. They can be used to collect data as well as determine optimal goals for the pupil within the boundaries of his/her life. The behaviors of concern could be viewed as deficits, excesses or assets depending on cultural valuation. Thus, the pupil's behavior must be viewed in conjunction with his/her environment, keeping in mind that the initial classification of a pupil using either a traditional or behavioral approach to assessment may not retain its appropriateness when changes in the pupil's life conditions and overall activities begin to occur.

The following maxims regarding behavioral assessment have been extracted from Mash and Terdal's (1974) work:

1. Deviant behavior is not normative; must assess intra- rather than inter-individual differences.

2. Behavior is not transituational; intra-individual variability in behavior across time and situations.

3. Given the same situation, stability in individual's behavior should be expected.

4. Assessment must include some measure of the context in which the behavior being assessed occurs.

5. The primary focus of assessment is on providing information that can be used in the design, implementation and evaluation of programs of behavioral change.

6. The appropriate arena for assessment is the individual's natural environment.

7. Assessment is ongoing and self-corrective.

There are two assumptions which seem to underly these maxims. The assessment process will follow the procedures used in single subject research design and will meet the rigors of applied research design. Implicit in these assumptions is that an initial evaluation has taken place (baseline) which has resulted in sufficient data; there is a means to measure the effects of intervention (ABAB or multiple baseline designs, Kazdin, 1973) and a planned or programmed follow up. It is not easy to adhere to these maxims and assumptions. Replication of data over time is dependent on the situation and intervening variables, while replication across different sources or raters is controlled by such source factors as relationship to pupil, objectivity, training, etc. (Goyette, Conners, & Ulrich, 1978; Harris, Drummond, & Schultz, 1977; Langhorne, Loney, Paternite, & Bechtoldt, 1976; Quay, 1977). The generalization potential of data is dependent upon the above factors as well as whether an adequate sample of behavior has been obtained. The problems in behavioral assessment can be counteracted by collecting quantifiable data from multiple sources so efficacy can be measured and by continuing assessment throughout intervention.

Use of Data

How does the assessment process lead to decision making? Two major purposes for assessment appear to be: (a) the determination of eligibility for special education services, and (b) the development of an individualized education program (IEP). In compliance with federal mandates, it has been suggested that the following steps be taken to determine eligibility for special education services:

1. Specify what criteria were used to determine eligibility, i.e., the kinds of formal and informal testing which occurred.

2. Reach a group concensus as to the handicapping conditions which exists.

3. Determine if the student meets the eligibility requirements set by state and local policy (Holmes, Midwest Regional Resource Center, & Ford, 1978, p. 251).

Whereas the components of the individualized education plan or program are described in the Federal Register (1977): (Put Transparency #1 on the overhead if using as part of a learning activity.)

§121a.346 Content of Individualized Education Program

The individual education program for each child must include:

(a) a statement of the child's present levels of educational performance;

(b) a statement of annual goals, including short term instructional objectives;

(c) a statement of the specific special education and related services to be provided to the child, and the extent to which the child will be able to participate in regular educational programs;

(d) the projected dates for initiation of services and the anticipated duration of the services; and

(e) appropriate objective criteria and evaluation procedures and schedules for determining, on at least an annual basis, whether the short term instructional objectives are being achieved. (p. 42491)

It is this author's belief that in order to translate data into decision making/determine eligibility and need for special services, the multidisciplinary assessment team must do the following:

1. Record data for each area of investigation.

2. Determine present level of performance by describing pupil's strengths and weaknesses.

3. Summarize what pupil can do.

4. Establish priorities.

5. Write goal statements.

Although the above activities are often thought of as part of the IEP, they cannot be separated from the decision-making process as they are the major components of such a process.

A Case Study

The following pages describe an activity which can be used to demonstrate the translation of data into decision making. The material has been adapted from The Appraisal Process in Special Education developed by Holmes, Midwest Regional Resource Center, and Ford (1978). In order to use this activity with your colleagues, you will need to provide them with comprehensive data concerning a referred pupil.

ACTIVITY NOTES FOR TRANSLATING DATA INTO DECISION MAKING: A CASE STUDY

(EACH PARTICIPANT SHOULD HAVE BEEN GIVEN COMPREHENSIVE DATA CONCERNING A PUPIL PRIOR TO THE ACTIVITY.)

I. Introduction to Present Level of Performance

A. We are now going to look at how to use the information that has been collected to determine eligibility for services and to write a learner's individual education program.

B. The first step is to record the data that has been gathered for each area of investigation.

(PUT TRANSPARENCY #2 ON THE OVERHEAD.)

C. The second step is to determine the present level of performance and write a statement which summarizes the level of performance.

(PUT TRANSPARENCY #3 ON THE OVERHEAD.)

D. The statement of level of performance is a comprehensive statement of the learner's current level of performance. This statement:

1. Summarizes what the learner can do

2. Describes the learner's strengths and weaknesses

E. This statement is not a listing of test scores. Labels also do not constitute statements of levels of performance.

(PUT TRANSPARENCY #4 ON THE OVERHEAD AND HAND OUT ONE COPY OF HANDOUT #1 TO EACH PARTICIPANT.)

F. When developing the statement of present level of performance from all the appraisal data which has been collected, it is helpful to have some type of organizational framework to work from. These are some suggestions for developing a performance statement:

1. Summarize the appraisal data in general categories, such as:

- Intellectual
- Academic
- Social/behavioral
- Physical

2. As you analyze the data in each category, synthesize the data into statements of student capability - what the student can do currently.

3. Once you have these statements, arrange them into a brief paragraph.

II. Writing Present Level of Performance Statements

A. Let's look at some data that were gathered on (name of pupil) and record the data that has been gathered, then write a statement of level of performance for (name of pupil).

(HAND OUT A CASE STUDY FOR A PUPIL, ACTIVITY SHEET #1, AND RECORDING SHEETS #1 AND 2. DIVIDE THE PARTICIPANTS INTO GROUPS OF THREE TO FIVE DEPENDING ON SIZE OF GROUP.)

B. Let's go over the Activity Sheet together to see if you have any questions about your task.

C. Are there any questions? You have about 20 minutes to record the data for each area and develop your performance statements.

(AFTER ABOUT 20 MINUTES, CALL THE PARTICIPANTS BACK TO THE LARGE GROUP).

D. Let's share some of the data sheets and performance statements.

(CONTINUE UNTIL SEVERAL GROUPS HAVE HAD A TURN. BE SURE TO POINT OUT THE SIMILARITIES BETWEEN THE STATEMENTS.)

III. Areas of Concern

A. Now that we have determined the present level of performance and have written the performance statement, the next step is to identify areas in which the pupil needs help or areas of concern.

B. Let's look at (name of pupil). Most of you mentioned _____ _____ in your statements of performance. Would you agree that this is an area of concern for (name of pupil)?

C. Once we have identified the areas of concern, we establish priorities. Areas which parents and staff pinpoint as critical become the high priority items.

D. When establishing priorities, it is important to consider the age of the pupil and the amount of time left in school.

E. This consideration of areas of concern and the establishing of priorities within the framework of the individual learner leads directly into the development of goal statements.

F. Let's identify our areas of concern for (name of pupil) and rank these areas of concern.

(HAND OUT ONE COPY OF ACTIVITY SHEET #2 AND RECORDING SHEET #3 TO EACH PARTICIPANT.)

C. In this activity, you are to identify four or five areas of concern for (name of pupil). Once you have identified the areas, you are to record them on the worksheet.

H. Do you have any questions?

Writing Goal Statements

IV. Introduction to Goal Statements

A. In the last activity, we identified areas of concern and ranked these concerns.

B. We stated that these areas of concern provide the framework from which goal statements are developed.

C. Goal statements are statements of what the learner is expected to be able to accomplish over a long tyerm.

D. Since the federal law requires at least an annual review of progress, these goal statements are often stated in annual terms.

(PUT TRANSPARENCY #5 ON THE OVERHEAD.)

E. Let's look at some general characteristics of goal statements. They:

1. Are broadly stated.
2. Are annual.
3. Are clearly worded.
4. Address a single concept or area.
5. State what the learner is going to do.
6. Are realistic and attainable.

F. These are some examples of goal statements. Do you have any question regarding these goal statements?

(PUT TRANSPARENCY #6 AND #7 ON THE OVERHEAD.)

V. Writing Goal Statements

A. Now that we have an understanding of goal statements, we are going to write goal statements for (name of pupil).

(HAND OUT ONE COPY OF ACTIVITY SHEET #3 TO EACH PARTICIPANT.)

B. Read through the directions on the activity sheet. Are there any questions about what you are to do? You may have 20 minutes to complete this activity.

(CALL THE PARTICIPANTS BACK TOGETHER AS A LARGE GROUP AFTER 20 MINUTES.)

C. What group would like to read their first priority area of concern and the goal statements written to meet that area of concern?

(CONTINUE WITH THIS PROCEDURE UNTIL ALL THE AREAS OF CONCERN HAVE BEEN MENTIONED.)

VI. Making Decisions

A. We have now used the information gathered through the assessment process to write level of performance statements and goal statements.

B. The next step is to determine if the pupil is eligible for and in need of special education services.

1. It will be necessary to review each phase of the criteria for special education services and compare the statement of level of performance to this criteria. In Iowa, one would ask whether the pupil has displayed.

> "a pattern of situationally inappropriate behavior observed in the school setting which deviates substantially from behavior appropriate to one's age and significantly interferes with the learning process, interpersonal relationships or personal adjustment of the pupil. The determination of this handicap is largely based on consistency, intensity, and duration of the behavior of concern." (State of Iowa, Rules of Special Education, 1977, p. 2)

If the statement of level of performance indicates such a pattern exists, then the pupil is eligible for spcial education services.

(REVIEW THE LOCAL, STATE AND FEDERAL ELIGIBILITY CRITERIA ALONG WITH THE PERFORMANCE STATEMENT YOU DEVELOPED.)

2. Even if the pupil is eligible for services, is this the optimal way to obtain the goals set forth for the pupil?

(REVIEW THE TYPE OF SPECIAL EDUCATION SERVICES AVAILABLE LOCALLY ALONG WITH THE GOAL STATEMENTS YOU DEVELOPED.)

VII. Summary

A. The major point to be made here is the importance of the proper collection of appropriate information so that decisions can be made and the IEP can be effectively developed for each pupil regardless of his/her eligibility for special education services.

B. Does anyone have any questions about how the information collected through the assessment process is used in making decisions?

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TRANSPARENCIES, RECORDING SHEETS,

HANDOUTS, AND ACTIVITY SHEETS

§121a.346 CONTENT OF INDIVIDUALIZED EDUCATION PROGRAM.

THE INDIVIDUAL EDUCATION PROGRAM FOR EACH CHILD MUST INCLUDE:

(A) A STATEMENT OF THE CHILD'S PRESENT LEVELS OF EDUCATIONAL PERFORMANCE;

(B) A STATEMENT OF ANNUAL GOALS, INCLUDING SHORT TERM INSTRUCTIONAL OBJECTIVES;

(C) A STATEMENT OF THE SPECIFIC SPECIAL EDUCATION AND RELATED SERVICES TO BE PROVIDED TO THE CHILD, AND THE EXTENT TO WHICH THE CHILD WILL BE ABLE TO PARTICIPATE IN REGULAR EDUCATIONAL PROGRAMS;

(D) THE PROJECT DATES FOR INITIATION OF SERVICES AND THE ANTICIPATED DURATION OF THE SERVICES; AND

(E) APPROPRIATE OBJECTIVE CRITERIA AND EVALUATION PROCEDURES AND SCHEDULES FOR DETERMINING, ON AT LEAST AN ANNUAL BASIS, WHETHER THE SHORT TERM INSTRUCTIONAL OBJECTIVES ARE BEING ACHIEVED.

FROM: FEDERAL REGISTER, 1977, 42(163), 42491.

TRANSPARENCY #2
RECORDING SHEET #1

DATA SHEET FOR (NAME OF PUPIL)

AREA OF INVESTIGATION	SOURCE OF INFORMATION	RESULTS
VISION/HEARING		
HEALTH/PHYSICAL		
BEHAVIOR/PERSONALITY SOCIAL AND EMOTIONAL STATUS		
ENVIRONMENT HOME SCHOOL OTHER		

TRANSPARENCY #2
RECORDING SHEET #1

DATA SHEET FOR (NAME OF PUPIL) (CONT'D.)

AREA OF INVESTIGATION	SOURCE OF INFORMATION	RESULTS
GENERAL INTELLIGENCE		
ACADEMIC PERFORMANCE		
SPEECH/LANGUAGE		
PERCEPTUAL AND MOTOR DEVELOPMENT		

PRESENT LEVEL OF PERFORMANCE

A COMPREHENSIVE STATEMENT OF A LEARNER'S CURRENT LEVEL OF PERFORMANCE.

THIS STATEMENT:

- SUMMARIZES WHAT THE LEARNER CAN DO
- DESCRIBES THE LEARNER'S STRENGTHS AND WEAKNESSES

SOURCE: THE APPRAISAL PROCESS IN SPECIAL EDUCATION - DEVELOPED BY RITA L. HOLMES AND THE MIDWEST REGIONAL RESOURCE CENTER WITH REVISIONS BY KAREN KAY FORD, 1978.

DEVELOPING
PERFORMANCE STATEMENTS

1. SUMMARIZE APPRAISAL DATA, E.G.,
   - INTELLECTUAL
   - ACADEMIC
   - SOCIAL/BEHAVIOR
   - PHYSICAL
2. SYNTHESIZE DATA INTO STATEMENTS OF CAPABILITY.
3. ARRANGE THESE STATEMENTS INTO A BRIEF PARAGRAPH.

SOURCE: THE APPRAISAL PROCESS IN SPECIAL EDUCATION - DEVELOPED BY RITA L. HOLMES AND THE MIDWEST REGIONAL RESOURCE CENTER WITH REVISIONS BY KAREN KAY FORD, 1978.

DEVELOPING
PERFORMANCE STATEMENTS

1. Summarize appraisal data, e.g.,
   - Intellectual
   - Academic
   - Social/Behavior
   - Physical
2. Synthesize data into statements of capability.
3. Arrange these statements into a brief paragraph.

Source: The Appraisal Process in Special Education - Developed by Rita L. Holmes and the Midwest Regional Resource Center with Revisions by Karen Kay Ford, 1978.

DESCRIBING PRESENT LEVELS OF PERFORMANCE

1. Write the assessment results for (name of child) on the data sheet. (Recording Sheet #1)

2. Read through your data sheet.

3. Write statements for each of the categories which you feel should be a part of the level of performance.

4. Formulate a comprehensive statement of level of performance and record it on Recording Sheet #2.

Child's Name _____ Date Referred to Committee

School _____ _____

SUMMARY OF PRESENT LEVELS OF PERFORMANCE:

PRIORITIZED LONG-TERM GOALS:

*From Guide for Trainers, A Resource for Workshops on Developing Individual Education Plans; National Association of State Directors of Special Education.

DESCRIBING PRESENT LEVEL OF PERFORMANCE

1. Work with the same group of individuals.

2. As a group decide upon four or five areas of concern for Mike.

3. As a group prioritize the areas of concern and record them on Recording Sheet #3.

AREA OF CONCERN	GOAL STATEMENT
FIRST PRIORITY	
SECOND PRIORITY	
THIRD PRIORITY	

AREA OF CONCERN	GOAL STATEMENT
FOURTH PRIORITY	
FIFTH PRIORITY	

GOAL STATEMENTS

CHARACTERISTICS OF GOAL STATEMENTS:

- BROADLY STATED
- ANNUAL
- CLEARLY WORDED
- ADDRESS A SINGLE CONCEPT OR AREA
- STATE WHAT THE LEARNER IS GOING TO DO
- REALISTIC AND ATTAINABLE

SAMPLE - ANNUAL GOALS

1. TO IMPROVE AUDITORY DISCRIMINATION AND ARTICULATION OF "S," "Z," "TH," AND "R" SOUNDS IN EVERYDAY SPEECH.

2. TO IMPROVE USE OF NEGATIVE CONSTRUCTIONS ("CAN'T," "DON'T," "WON'T") AND PAST TENSE VERBS.

3. TO IMPROVE EXPRESSIVE LANGUAGE SKILLS BY ORALLY PRESENTING THOUGHTS IN SEQUENTIAL ORDER AND IN COMPLETE SENTENCES.

4. TO DECODE AND COMPREHEND READING MATERIAL TO A THIRD GRADE LEVEL.

5. TO WRITE A SEQUENTIAL STORY USING THREE COMPLETE SENTENCES.

6. TO ATTEND TO ACADEMIC TASKS FOR 30 MINUTES.

SAMPLE - ANNUAL GOALS

1. TO READ AND COMPREHEND READING MATERIAL AT THE 3.5 GRADE LEVEL.

2. TO UNDERSTAND MATH CONCEPTS AND SOLVE MATH PROBLEMS AT THE 3.5 GRADE LEVEL.

3. TO WRITE IN CURSIVE A WELL ORGANIZED, LEGIBLE, FIVE SENTENCE PARAGRAPH.

4. TO RESPOND APPROPRIATELY TO SOCIAL STUDIES AND SCIENCE CONCEPTS TO THE 3.5 GRADE LEVEL.

GOAL STATEMENTS

1. In your groups, you are to write goal statements for (name of pupil).

2. In each area of concern write at least one goal statement.

3. Record the goal statements on Recording Sheet #3 which was used in the last activity.

4. Next, record your goal statements on the IEP form. This is Recording Sheet #2.

5. Decide on the need for special education services.

RESOURCES FOR ASSESSMENT

REFERRAL ANALYSIS SHEET

1. Why has the student been referred?

2. Does the referral include descriptive samples of behavior or are they opinion statements?

3. What information is included on non school-related variables:

   Health-

   Family-

   Environment-

4. What information is included on school-related variables:

   Intellectual-

   Academic-

   Behavioral-

Source: Holmes, R. L., Midwest Regional Resource Center, & Ford, K. K. The appraisal process in special education. Des Moines, Iowa: Midwest Regional Resource Center, 1978.

Physical-

5. What efforts has the school made to meet this student's needs prior to the referral?

Based on your analysis of the referral form, check which of the following options should be pursued for this student:

_____ No evaluation or services required.

_____ Further informal information requested.

_____ Additional appraisal required.

Adapted from: Kanfer, F. H. & Saslow, G. An outline for behavioral diagnosis. In E. J. Mash & L. G. Terdal (Eds.), Behavior therapy assessment (Vol. 2). New York: Springer Publishing Company, Chapter 5, pp. 91-97, 1976.

II. Clarification of Problem Situation

A. Assign the classes of problematic responses to behavioral excess or behavioral deficit, as study of the client proceeds.

B. Which persons or groups object to these behaviors? Which persons or groups support them? Who persuaded or coerced the client to come to the clinician?

C. What consequences doe the problem have for the client and for significant others? What consequences would removal of the problem have for the client or others?

D. Under what conditions do the problematic behaviors occur (biological, symbolic, social, vocational, etc.)?

E. What satisfactions would continue for the client if his/her problematic behaviors were sustained? What satisfactions would the client gain if, as a result of psychiatric intervention, his/her problematic behavior were changed? What positive or aversive effects would occur for significant others if the client's problematic behaviors were changed? How would the client continue to live if therapy was unsuccessful, that is, if nothing in his/her behavior changed?

F. What new problems in living would successful therapy pose for the client?

G. To what extent is the client as a sole informant capable of helping in development of a therapy program?

The questions raised here are derived from the assumption that maladjusted behavior requires continued support. It cannot be banished from the client's life for all future circumstances. Change in it is related closely to the environment in which the person needs to live. Elimination of the problematic behavior is also impossible as long as powerful, and often undefined, reinforcing events operate. The answers to the above questions can help to bring about an early decision about the optimal goals within practical reach of the clinician and within the inevitably fixed boundaries of the client's life pattern.

III. Motivational Analysis[1]

A. How does the client rank various incentives in their importance to him/her? Basing judgment on the client's probably expenditure of time, energy or physical discomfort, which of the following reinforcing events are relatively most effective in initiating or maintaining his/her behavior:

achievement of recognition, sympathy, friendships, money, good health, sexual satisfaction, intellectual competence, social approval, work satisfaction, control over others, securing dependency, etc.?

B. How frequent and regular have his/her succeses been with these reinforcers? What are his/her present expectations of success for each? Under what circumstances was reinforcement achieved for each of these incentives?

C. Under what specific conditions do each of these reinforcers arouse goal-directed behavior (biological, symbolic, social, vocational)?

D. Do his/her actions in relation to these goals correspond with his/her verbal statements? How does any definable discrepancy affect goals and procedures in therapy?

E. Which persons or groups have the most effective and widespread control over his/her current behavior?

F. Can the client relate reinforcement contingencies to his/her own behavior, or does he/she assign reinforcement to random uncontrollable factors ("superstitious" behavior, belief in luck, fate, miracles, etc.)?

G. What are the major aversive stimuli for this client (1) in immediate day-to-day life, (2) in the future? Are there bodily sensations, conviction of illness or fears of illness which serve as important aversive stimuli for change? What are his/her fears, the consequences which he/she avoids and dreads, the risks which he/she does not take?

H. Would a treatment program require that the client give up current satisfactions associated with his/her problem, e.g., invalid status in the family or on the job; gratifications possibly due to unemployment; life restrictions and special privileges justified by his/her "nervous" status; illness as justification for failure to fulfill expectations of him/herself or others?

I. Which events of known reinforcing value can be used for learning new interpersonal skills or self-attitudes during treatment? In what areas and by what means can positive consequences be arranged to follow desired behaviors, replacing earlier aversive consequences?

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[1]A Reinforcement Survey Schedule, recently prepared by J. R. Cautela and R. Kastenbaum (1967), provides a written instrument which may be of great value in obtaining specific information about some of the reinforcing stimuli elicited by items in this section.

IV. Developmental Analysis

A. Biological changes.

1. What are the limitations in the client's biological equipment which may affect his/her current behavior (e.g., defective vision and hearing/ residuals of illnesss, such as stroke, poliomyelitis, mononucleosis, glandular imbalances)? How do these limitations initiate or maintain undesirable behaviors (e.g., behavioral constrictions due to fatigue, fear of overexertion, avoidance of social exposure of these deficits)? Can the client's self-limiting expectations of the interfering consequences be changed?

2. When and how did biological deviations or limitations develop? What consequences did they have on his/her life-pattern and on his/her self-attitudes? What was done about them, by whom? Has he/she developed specific consistent response patterns toward some body structure or function?

3. How do these biological conditions limit response to treatment or resolution of his/her problems?

B. Sociological changes.

1. What are the most characteristic features of the client's present sociocultural milieu (with regard to urban versus rural environment, religious affiliation, socioeconomic status, ethnic affiliation, educational-intellectual affiliation, etc.)? Are his/her attitudes congruent with this milieu? For instance, how is a college orientation of an adolescent accepted by his/her peer group in a poor neighborhood? How does the home and neighborhood environment respond to a client's religious, social, and sexual activities and fantasies.

2. Have there been changes in this milieu which are pertinent to his/her current behavior? If so, how long ago, how permanently, and under what conditions did such changes occur? What immediate consequences did they have for the behavior of the client? For example, what impact on a wife did a husband's rapid promotion have? Or a marriage into a different socioeconomic or religious group? Or a move from a rural southern community to an urban northern part of the United States?

3. Does the client view these changes as brought about by himself/herself, by significant persons or by fortuitous circumstances? What attitudes does he/she have about these changes?

4. Are the client's roles in various social settings congruent with one another? For example, is there role conflict between value systems of the client's early and adult social environments? Are there behavioral deficits due to the changes (e.g., an inability to cope with new social demands, sexual standards or affectional requirements, associated with rapid acquisition or loss of wealth or geographic relocation)? If the roles are incongruent, is incongruence among these roles pertinent to his/her problem? Does the problematic behavior occur in all or only some of these different settings?

5. How can identified sociological factors in the problematic behaivor be brought into relation with a treatment program?

C. Behavioral changes.

1. Prior to the time of referral did the client's behavior show deviations in behavioral patterns compared with developmental and social norms? If so, what was the nature of changes in social behaviors, in routine self-care behaviors, in verbal statements toward self and others? Under what conditions were these changes first noted?

2. Do identified biological, social or sociological events in the client's life seem relevant to these behavior changes?

3. Were these changes characterized by (a) emergence of new behaviors, (b) change in intensity or frequency of established behaviors or (c) nonoccurrence of previous behaviors?

4. Under what conditions and in which social settings were these behavioral changes first noted? Have they extended to other social settings since the problematic behavior was first noted?

5. Were the behavioral changes associated with the client's exposure to significant individuals or groups from whom he/she learned new patterns of reinforcement and the behavior necessary to achieve them? Can the problematic behaviors be traced to a model in the client's social environment from whom he/she has learned these responses?

V. Analysis of Self-Control

A. In what situations can the client control these behaviors which are problematic? How does he/she achieve such control, by manipulation of self or others?

B. Have any of the problematic behaviors been followed by aversive consequences by others, e.g., social retribution, jail, ostracism, probation, etc? Have these consequences reduced the frequency of the problematic behavior or only the conditions under which it occurs? Have these events modified the client's self-controlling behavior?

C. Has the client acquired some measure of self-control in avoiding situations which are conducive to the execution of his/her problematic behavior? Does he/she do this by avoidance or by substitution of alternate instrumental behaviors leading to similar satisfactions?

D. Is there correspondence between the client's verbalized degree of self-control and observations by others? Can the client match his/her behavior to his/her intentions?

E. What conditions, persons, or reinforcers tend to change his/her self-controlling behavior (e.g., a child behaves acceptably at school but not at home, or vice versa)?

F. To what extent can the client's self-controlling behavior be used in a treatment program? Is constant supervision or drug administration necessary to supplement self-control?

VI. Analysis of Social Relationships

A. Who are the most significant people in the client's current environment? To which persons or groups is he/she most responsive? Who facilitates constructive behaviors? Who provokes antagonistic or problematic behaviors? Can these relationships be categorized according to dimensions which clarify the client's behavioral patterns (e.g., does a client respond in a submissive or hostile way to all older men/women)?

B. In these relationships, by use of what reinforcers do the participants influence each other? For example, analysis may reveal a father who always bails out a delinquent son whose public punishment would be embarrassing to the father. Is the cessation of positive reinforcement or onset of punishment clearly signaled?

C. What does the client expect of these people in words and in action? On what does he/she base his/her verbal expectations?

D. What do these people expect of the client? Is there consistency between the client's and others' expectations for him/her?

D. How can the people who can influence the client participate in treatment?

VII. Analysis of the Social-Cultural-Physical Environment

A. What are the norms in the client's social milieu for the behaviors about which there is a complaint?

B. Are these norms similar in various environments in which the client interacts, e.g., home and school, friends and parents, work and social milieu, etc.? If not, what are the major differences in behaviors supported in one but not in other environments?

C. What are the limitations in the client's environment which reduce his/her opportunties for continued reinforcement; are social, intellectual, sexual, vocational, economic, religious, moral or physical restrictions imposed by his/her environment?

D. In which portion of the environment is the client's problematic behavior most apparent, most troublesome, or most accepted? Can the congruence of several environments be increased or can the client be helped by removal from dissonant environments? Does his/her milieu permit or discourage self-evaluation?

E. Does his/her milieu regard psychological procedures as appropriate for helping him/her solve his/her problems? Is there support in his/her milieu for the changes in attitudes and values which successful psychotherapy may require?